

# A Register of Liberty Seated Half Dollar Varieties

# Volume V

# The Philadelphia Mint 1839 to 1852



By Bill Bugert

With special edits by and consultations with Randy Wiley

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# To Past, Present, and Future Collectors of the Liberty Seated Half Dollar Series

#### **Foreword**

This Register is the fifth in a series of eight planned books on the die marriages of Liberty Seated Half Dollars. The previous Volumes on the mintmarked Liberty Seated half dollar die marriages are listed with summary information in the following table:

Volume	Published	Half Dollar Contents	# Die Marriages
I	May 2009	San Francisco 1855-S to 1878-S	228
II	May 2010	Carson City 1870-CC to 1878-CC	96
11	July 2013 (2 <sup>nd</sup> Ed.)	Carson City 1870-CC to 1878-CC	100
III	June 2011	New Orleans 1840-O to 1853-O NA	217
IV	November 2013	New Orleans 1853-O WA to 1861-O	207

Since these four books were published, an additional twenty die marriages have been discovered and reported to me. I am delighted that collectors and dealers are using my Registers to attribute their half dollars.

This reference contains similar information for the 172 die marriages struck at the Philadelphia Mint from 1839 to 1852.

In 1993, Randy Wiley and I finished *The Complete Guide to Liberty Seated Half Dollars*. That book listed a finite and pre-determined number of the most easily identifiable die varieties of the series. Many other die varieties were known at the time of publication but were not included for various reasons best discussed elsewhere. This register is different and individually documents Liberty Seated Philadelphia Mint half dollar die marriages of obverse, reverse, and collar dies for 1839 to 1852. It is commonly misunderstood by many collectors and dealers that the Liberty Seated denominations have been studied as extensively as the older copper and bust series, where the discovery of new die marriages is rare. This is far from reality. The older copper and bust series have been extensively collected and exhaustively studied for many decades. The Liberty Seated series are far behind in that respect and have a lot of catching up to do. I hope to help that along for the half dollars.

This Register does not include everything everyone wants to know about Philadelphia Mint Liberty Seated half dollars. Specifically, no information is included on condition census (generally, I have little interest in that) and there is no pricing information (pricing information has limited value because it is too volatile and including it would quickly outdate this reference). Alternatively, I have included estimated rarity ratings and will leave condition census and valuations for others to study and to report.

It is no coincidence that the name of this Register is similar to ML Beistle's 1929 reference on half dollar die varieties. His work provided me with my initial impetus to collect half dollars by die marriage. I have studied, written, lectured, and exhibited information about ML Beistle extensively and have an admiration for his personal and professional accomplishments.

Lastly, this publication could not have been possible without the cooperative efforts of Randy Wiley. He knows more about Liberty Seated half dollars than anyone I know. He and I have been studying the die marriages of these coins for decades and much of the information we derived together is contained herein.

Thanks for taking the time to read this and I hope this Register finds its way into your numismatic library.

Bill Bugert Gettysburg, PA November 2016

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#### Introduction

#### The purpose of this Register is four-fold:

- To document all the currently known circulation strike Liberty Seated half dollar die marriages produced at the Philadelphia Mint from 1839 to 1852 (Proofs are not included)
- To assist the beginning or advanced Liberty Seated half dollar collector into expanding beyond type, date, or date/mint collecting into die marriage collecting
- To aid the casual collector or dealer with proper variety identification and other pertinent information
- To establish a standard nomenclature for the Liberty Seated half dollar die marriages.

At the time of publication, all known 1839 to 1852 dated Liberty Seated Philadelphia Mint half dollar die marriages are documented in this register. I have included the key characteristics of obverse and reverse die marriages so that you could readily identify your half dollar. It is important to note that the mid-1800 minting technology had advanced to a state that, in contrast to the pre-1836 bust style designs, the date (with the exception of 1853-1855 Arrows half dollars), and mintmarks were the only design elements emplaced into the working dies used to mint coins. The other design elements such as dentils, Liberty, stars, denomination, legend, motto, and eagle were all in the hub and, consequently, have no variations when transferred to the working dies. These advancements, however convenient for the minting process, vastly compound the difficulty in identifying characteristics of the individual working dies, and consequently, the die marriages. We must rely on variations in the placements of the date and mintmark and die imperfections for proper variety identification.

For ease of the readers' use, I desired to depict each obverse and reverse die marriage on two pages; this space limitation forced me to be selective on the die characteristics that I specified and photographed. Consequently, I picked the die lines and cracks that I thought were most prevalent for that variety and that could be easily identified using a quality hand held 10-power magnifier and, for date grid measurements, a 10-power hand held optical comparator. Make no mistake about it, a good 10 to 30-power stereomicroscope with a reticle is a worthwhile investment when studying and attributing varieties of all denominations at home.

Excluding the Beistle number system that is not used today, the current standard Liberty Seated half dollar variety nomenclature is the WB-100 series system. This WB number, for Wiley-Bugert, is derived from the 1993 book, *The Complete Guide to Liberty Seated Half Dollars*. Unfortunately and a point of some confusion, many WB-100 numbers by design include more than one die marriage per number because that book lists major varieties only. For example, the 1840-O WB-104 Large Mintmark half dollar included eight reverse dies. This system is unsatisfactory for the serious half dollar variety collector where a single number represents a single die marriage. This Register starts anew with separate die marriages with WB-X series numbers.

It is very important to note that the die characteristics photographed and/or described herein may or may not be visible on your coin. Die states, coin wear, toning, damage, etc. may affect the visibility of these characteristics and, for those reasons, you may find some diagnostics on your half dollar that are not listed in my descriptions. In many cases, I have included photographs of the latest die state and may include comments of other die states. Coins grading below VG will not show most of the die characteristics I have depicted simply because the key die diagnostics are worn away.

In discussing my plans with others before this reference was published, some collectors and dealers wanted an online version while others wanted a useful physical media. I chose the latter in a workbook style three-ring binder and plastic spiral binding formats for easy desktop reference work and for portable operations at a coin show. I wanted a user to be able to quickly and easily pluck useful attribution

information from this Register. I believe this format accomplishes that. All too often, the hardbound books in my numismatic library are too tightly bound, making page turning awkward and potentially loosening the binding glue or breaking the binding's back. I did not want my readers to suffer this inconvenience especially when I wish my Register to be used often.

It is my desire that this reference creates sufficient interest in collecting by die marriage and someday the "Seated Half Nut Club" (i.e., similar to the "Bust Half Nut Club" where a requirement for membership is owning at least 100 different varieties of the bust half dollar series) is a well-known and popular club.

I know it will be a disappointment to some but I did not include pricing information, grade availability, or valuations of the die varieties in this Register. In my experience, that type of information is very quickly outdated and useless after a few months if not updated. Collector interest and the market will drive most valuations. The financial complexities of the rare coin market are best left to the economists. As an alternative, I included initial rarity estimates. Almost all the rarity numbers are my estimates based primarily on years of observation and by discussions with other knowledgeable individuals. I have a varying comfort level with many of the dates; it will take years to properly associate a correct rarity number with a specific die marriage.

This book does not include a tutorial on basic coin collecting, grading half dollars, or a lengthy history behind the Liberty Seated series. I assume the reader has a basic understanding of these numismatic topics; besides, many other references cover them in great detail and I will not duplicate the efforts of others here. The following introductory sections contain background information required to understand the variety attributions of the Liberty Seated half dollar series. Please take sufficient time to read and understand them before attempting to use this Register.

At this point, I think it appropriate to provide some advice and encouragement to collectors of die marriages of Liberty Seated half dollars. First, if you are looking to complete a die marriage set in a few short years, look elsewhere. It will literally take many years of aggressive searching to fill all or most of the holes. Even with the benefit of a thick wallet, many die marriages seldom appear on the market and when they do, are quickly snatched up by other serious collectors with similar goals. If you bound your goal to collecting a few years, mints, or types, then the target becomes easier to attain. Otherwise, collecting all the die marriages of all the dates is an expensive nearly impossible lifetime commitment (e.g., there are 752 documented mintmarked Liberty Seated half dollars and I estimate there are a total of 1,800 die marriages for the Liberty Seated half dollar series.). I know of only three collectors, including myself, with the perseverance to attempt this and, I can attest, I have spent over three decades collecting die marriages of these half dollars. However, it is a wonderful pastime that has kept my interest for many years and provided many hours of enjoyment; it also helps to have a supportive spouse or partner. I wish you the same.

Lastly, as I mentioned in the Foreword, this Register would not have been possible without the efforts of my numismatic friend and colleague, Randy Wiley. He and I have been studying these half dollars together since the early 1980s and we've spent many hours together engrossed in determining die diagnostics, counting reeds, taking notes, and discussing new finds. His astute analytical collecting techniques, motivation, and sheer determination are in a large part responsible for what is being published herein. For that and for his friendship, I thank him.

# Abbreviations, Conventions, and Definitions of Terms Used in this Book

It is very important to understand the terms used throughout this text so that my written descriptions convey the proper meaning to you, the reader.

**Liberty and LIBERTY.** "Liberty" in lower case letters refers to the figure of Miss Liberty on the obverse. "LIBERTY" in upper case letters refers to the words LIBERTY found on the scroll of the obverse design.

**Viewing a coin.** Often confusing if not clarified, the terms "right" and "left" are used when viewing a coin and referencing features from the viewpoint of the observer's right and left respectfully. For example, when referring to the eagle's left claw, the claw referred to is that on the viewer's left and NOT the eagle's left claw (which would be on the observer's right).

**Star numbering.** Obverse stars are counted clockwise starting with the first star on the lower left to the thirteenth start at the lower right.

**Measuring units.** I opted for the U.S. standard of inches to measure date height, mintmark size, and diameters of coins.

**Photographs.** Almost all images are not actual size but scaled to annotate various desired features. Some collectors may want to reference date positions to the dentils below the date instead of the date grid technique. Consequently, date position images include the lower dentils.

**Date Grid measurements.** See the detailed explanation elsewhere in this Register.

**Device and device naming.** A device is the primary motif on the obverse and reverse die. For the obverse, the primary device is the figure of Liberty while on the reverse, it is the eagle. Supporting devices are also on the observe and reverse. See the supplemental diagrams and descriptions.

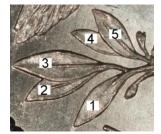
**Die Variety versus Die Marriage.** These terms, although different, are used almost interchangeably. Die variety refers to a coin struck from dies and, irrespective of die states; all pieces from those dies have the same characteristics. Die marriage refers to a coin struck from a combination of three dies; the obverse, reverse, and collar dies. The differences are subtle but they, as mentioned, are almost used interchangeably. It is important to note that a die crack may help to identify a die variety but is a die state and not a separate die variety or marriage.

**EDS, MDS, LDS, VLDS.** These acronyms are short for early die state, middle die state, late die state, very late die state and refer to a subjective progress of die deterioration.

**K-1 thru K-12.** The abbreviation for a clock's hour hand position (i.e., 1 o'clock thru 12 o'clock) specifically around the outer circumference of a coin.

**Lines, Lumps, and Gouges.** These terms are utilized when describing the various die diagnostics for each variety. A *line* on the coin is raised and results from a scratch, stray mark, slip of the engraver's tool, and/or polishing of the dies. A *lump* is a raised piece of metal on the coin that resulted from die damage, rust, and/or clashing of the dies. *Gouges* are also raised metal on a coin resulting from oddly shaped heavier damage to the die. These three items are critical to differentiating dies and identifying the key die characteristics.

**Reverse olive leaf numbering system.** Reverse olive leaves are numbered 1 thru 5 starting with 1 as the lowest olive leaf then numbering clockwise 2 thru the uppermost leaf as #5. Note: leaves 2 and 4 show only partially.



**Reverse shield line numbering system.** Reverse vertical shield lines are designated alpha-numerically with a letter designating a group of shield lines and a number referencing an individual vertical shield line within that group. For example, B-3 refers to the third (3) vertical line (counting from the left) in the second grouping of shield lines (group B). C-2 refers to the second shield line in the third grouping. Possibilities include A thru F - 1 thru 3.

**Enhanced die crack drawings**. On selected die marriages, I have included enhanced die crack diagrams. Prominent die cracks are hand drawn on low resolution printed photographs, scanned, and inserted for the readers use. As these die cracks are hand drawn and my hand is no longer optimally steady, they may not be exact and will not be all inclusive of the die cracks found on all die states of the dies; they are representative of the major die cracks that may be found for that die marriage. These enhanced die crack diagrams are meant to provide a quick visual reference and identification of specific dies.

**WB-#.** Die marriages are designated with a WB-#; WB is an acronym for Wiley-Bugert. I gave much thought to what numbering system to use in this reference. Randy Wiley and I used a WB-100 series numbering system in our 1993 book, *The Complete Guide to Liberty Seated Half Dollars*. Although seemingly ideal, I could not use that same system because many WB-100 series numbers used in our 1993 book include multiple die marriages lumped under a single WB variety number. I wanted to have a compact, easily remembered and referenced system that, for inventory and display purposes, could be readily sorted on a computer. The WB-# format was the next best option and is used herein. To aid the reader and long-time collectors, cross references to our first book's WB-100 series numbers are included for each die marriage.

**Cross references.** References of a specific die marriage to other publications are provided with each varieties' description. WB is a reference to varieties listed in Randy Wiley and Bill Bugert's *The Complete Guide to Liberty Seated Half Dollars*.

# Philadelphia Mint Half Dollar Design Types 1839 - 1852

The four major design types of 1839-1852 Philadelphia Mint half dollars are detailed in the following table.

Major Design Type	Dates of Design Type	Design Characteristics
No-Drapery	1839 Only	So-called for the lack of three folds below Liberty's right elbow, its design differences are actually more complex. The major difference between this type and all later dater dated Liberty Seated half dollars is the larger rock to the left of the obverse shield (upon which Liberty supposedly rests). See the 1839 Die Marriage section for more complete information.
With-Drapery	1839-1852	Later in 1839, the Liberty Seated obverse design was slightly modified to add three folds of drapery below Liberty's right elbow and to reduce the size of the rock upon which Liberty rests. These design features are noticeable and must have found favor as they were utilized for the remaining years of the Liberty Seated half dollar design. For additional information on the "rock," see the introductory section of 1839.
Small Letters Reverse	1839-1842	Used for only four years, the initial reverse dies for the Liberty Seated half dollar had small letters that were approximately .064" in height (as depicted in the image at right).
Large Letters Reverse	1842-1852	Noticeably larger than the preceding letter style, the reverse dies for the Liberty Seated half dollar in later years had large letters that were approximately .080" in height (as depicted in the image at right).

# **Early Philadelphia Date Logotype Sizes**

There are significant variations in the size (height) of the date logotype punch used on the working dies for Liberty Seated half dollars throughout the series. In the collecting community there is some disparity regarding the identification and labeling of these differences. The following table lists and depicts typical date sizes for the Philadelphia Mint Liberty Seated Half Dollars from 1839 to 1852.

Small	Medium	Large (Tall)		
.056064"	.076086"	.089096"		
1839 to 1842	1842 to 1846	1846 to 1852		
1840	1846	1846		

# **Naming Conventions: Obverse**



Note: With-Drapery design shown above; 1839 only has No-Drapery, small rock design

The central obverse design includes the figure of the Goddess Liberty seated on a rock looking over her right (observer's left) shoulder. Liberty is wearing a Greek chiton, or loose fitting gown, with a clasp at her shoulder. Her neck, upper chest, and arms are exposed. Liberty's hand supports the Shield of the United States, a sign of national preparedness, which is wrapped in a scroll inscribed with the word LIBERTY; her other hand grasps a pole surmounted by a pileus, a liberty cap emblematic of freedom. Thirteen stars, representing the thirteen original states, are spaced around the outer design from K-8 to K-4. As with all early silver coinage, the outermost design has equally spaced design elements called dentils.

### **Naming Conventions: Reverse**



Note: Large letters in the denomination and legend are shown here but small letters exist for 1839 – 1842 also.

The central reverse design portrays an eagle with wings spread bearing the Shield of the United States on its chest. The eagle is clutching an olive branch, which symbolizes peace, in its right (observer's left) claw and three arrows, symbolizing preparedness for war, in its left

(observer's right) claw. The denomination abbreviated HALF DOL. is below the eagle and the legend UNITED STATES OF AMERICA is above the eagle. Like the obverse, the outermost design has equally spaced design elements called dentils.

#### **Date Grid Measurements**

Unlike bust coinage, all Liberty Seated Half Dollars were struck from dies with most of the designs (e.g., Liberty and stars) impressed initially from a hub. Consequently, differentiating dies is difficult at best and the die marriage collector must rely on non-hubbed die diagnostics. For the obverse die, these diagnostics include die lines and cracks, die gouges, die maintenance remnants, and most importantly, date placement. Dates were emplaced into the working die with multi-figure and sometimes single digit logotypes and, therefore, obverse dies may have noticeable die placement variations. Mastering a technique to define a date placement will facilitate a quick method of identifying possible die varieties for a given date placement, especially when no other diagnostics are evident. Here is such a method: the date grid measurement (e.g., M3.5, .030").

The date grid is based on the position of the date's 1 and consists of two components: the position of the right vertical edge of the 1 with relation to Liberty's shield lines and, secondly, the distance between the top of the 1 and the base of the rock. A stereomicroscope with a linear scale on a reticule or an optical comparator is ideal for viewing and measuring the date placement. The photograph below symbolically depicts a microscope's reticle (vertical line) aligned in the correct measuring position. The shield lines are assigned an alphanumeric system whereby, the three center sets of shield lines are L (left), M, (middle), and R (right) and the individual shield lines are 1, 2, 3 (4, 5 are virtual shield lines equidistant in the large space between the shield line sets). The date placement is the real or virtual shield line (including a decimal increment between shield lines) where the reticle (aligned adjacent to the right edge of the 1) intersects the bottom inside shield edge. Increments of .5 signify an interpolation between two lines or virtual lines such that M2.5 is the seam between vertical stripes 2 and 3 while M3.5 is the right edge of vertical stripe 3, as below. Furthermore, the distance in inches between the top of the 1 and the bottom edge of the rock is the second component of the date grid. The example below is of an 1840 half dollar with a date grid of M3.5, .030".



Be aware that date grid is not and is not meant to be an absolute identifier for a specific obverse die. It is merely a tool for identifying a numeric date position for possible obverse die identification. In my experience, two experienced numismatists with the same equipment on the same coin may come up with two slightly different date grids. Measuring a date grid is not absolute and I, therefore, do not use it to positively identify a specific obverse die. Many half dollars of different dies have the same date grid and, additionally, die states affect a date grid's measurement.

As a general rule, severe die wear or die polishing will cause the date distance measurement to be greater and the date grid measurement to be further to the left (e.g., an early die state coin with a date grid measurement of M3.5, .030" may measure M3, .032" in a later die state). Late die states with heavily polished or worn dies will have different measurements than the same die of an earlier dies state. For example, the distance between the top of the 1 and the rock may be greater on the polished die than the non-polished die. Consider this effect when comparing date grid measurements.

Identifying known die marriages by the date grid allows comparison of an unknown die variety's date placement, thereby narrowing down an unidentified obverse die to a limited number of known varieties. In my experience, many date placements are similar for a given date but different enough to allow minute differentiation. The list below represents the date grid measurements for hypothetical half dollars of a certain date:

Obverse	Date grid
1	M3 , .008"
2	M3 , .025"
3	M3.5, .028"
4	M4 , .022"
5	M4.5, .027"

When encountering an unidentified half dollar, measure the date grid and compare it to the list of known obverse dies for the same date. You should be able to identify it to one or two of the obverse dies. In my photo example, the obverse die is closest to obverse 3. Further study of other die diagnostics may confirm the identification.

The date grid is a useful measurement to aid in identifying Liberty Seated half dollar obverse dies. Collectors of other Liberty Seated denominations utilize date placements in relation to dentils but I believe this method is more accurate and useful for half dollars.

# Edge Reeding and Collars Liberty Seated P-Mint Half Dollars 1839-1852

Often overlooked, the edge of a Liberty Seated half dollar contains reeds. Reeds were implanted with a collar, the coin's third die, and were meant to deter nefarious efforts to clandestinely remove silver from the edges of coins for profit. With the exception of some error coins, all Liberty Seated Half Dollars have reeds.

Reeded collars were heavy steel plates with a bore the size of the minted coin. A blank planchet was placed in the bore and reeds were raised on the edge of the coin at the same time the coin's designs were raised by the obverse and reverse dies.

Reeding on a coin was not standardized as collars were locally procured or made at the Philadelphia Mint. This practice resulted in variances in numbers and widths of reeds on half dollar edges.

Reed counts are useful information in counterfeit detection, authentication, and determining die emission sequences. Many collars can be distinguished by the number of reeds, reeding shape (tapered, fluted, or squared), telltale vertical imperfections between reeds, horizontal and vertical cracks in collars, and double reeds (i.e., two reeds very close to each other. Given time and effort, an extensive study could be made of edge reeding.

The following table itemizes reed counts for Philadelphia Mint Liberty Seated half dollars dated 1839 to 1852. The 145 reed collar is by far the most commonly used; 146 is the least used.

Date	143	144	145	146	147	148
1839 No-Drapery						
1839 With-Drapery						$\checkmark$
1840						
1841						
1842 Small Date			V			
1842 Medium Date						
1843		V	V			
1844		V	V			
1845	√	V				
1846 Medium Date			V			
1846 Large (Tall) Date		V	V			
1847		V	V			
1848		V	V			
1849		V	V			
1850			V			
1851			V			
1852		V	V			

### **Counting Reeds**

Periodically I have been asked that if determining a reed count is so important, then how do you easily count reeds? Randy Wiley and I have successfully been using a simple technique for years; with it, I have counted reeds on well over 2,000 Liberty Seated Half dollars and many other smaller denominations.

Counting reeds is actually quick simple if you understand the technique and have a few simple tools. Simply remove the reflector from an inexpensive flashlight, place the coin into the reflector under your stereo microscope, and slowly rotate the reflector with the coin while viewing the in-focus edge (i.e., reeds) through the microscope (see image at right). Start at an obvious flaw (as indicated in the image - all coins have them) and count (aloud is best so that you can ignore distractions) the reeds using the



reticule of your scope to keep track of your position; stop for breathers at easily referenced places (e.g., nicks, lint, cracks in the collar, etc.). Continue until you get to the starting reed. You may have to initially adjust the coin in the reflector to keep it in focus for the entire counting session. With practice, you can easily and accurately count the reeds on a coin in about 2-3 minutes. Be careful with the reflector surfaces; they scratch easily and you may end up replacing it more often than you like. One more thing, as you can probably tell from the image above, you can also photograph the edge of the coin with this technique.

Counting reeds on encapsulated coins. Realistically, forget about it. I have tried this on numerous occasions and it is nearly impossible, even with the new three-pronged holdered coins. Count the reeds on your coins before you send them in for grading.

# **Emission Sequence**

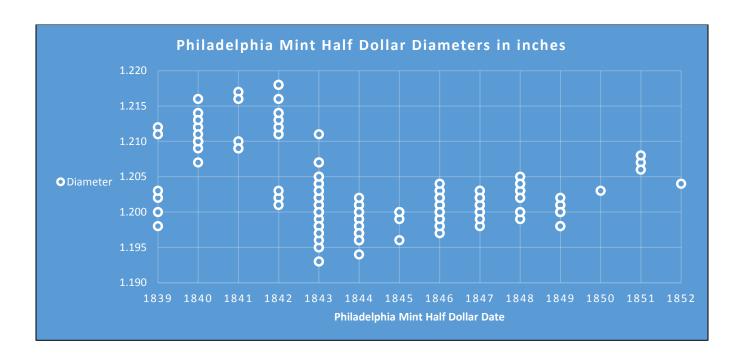
The die marriages of all dates are listed in ascending WB-X order per an estimated die emission sequence order; the first number is the first minted die marriage to the highest number being the last (usually the transitional die with the preceding or subsequent years). Factors considered to estimate this die emission sequence include die wear, die abrasions, die defects, collar groupings, and use of mintmark sizes (for the Branch Mint coins in the series).

Of note, emission assumptions are sometimes necessary but these are based on the most logical sequencing.

### Philadelphia Mint Half Dollar Diameters

The standard size of a half dollar diameter has been since 1839, and still is, 1.205 inches. I have measured the diameter of over 2,000 half dollars and only a few have that exact diameter. Since the diameter of a coin is dictated by the diameter of the opening in the collar and collars were procured through various methods (local, procured from the Philadelphia Mint, made in-house), there is no wonder that slight variations in half dollar sizes can be found.

The following diagram depicts summary information for the diameters of over 200 Liberty Seated half dollars struck at the Philadelphia Mint. As you can see, values vary considerably about the standard size with 1843 having the largest range. The smallest diameter was in 1843 with the largest in 1842. No date has a range centered on the standard.



### **Rarity Ratings**

Included with the description of each die marriage is an estimated rarity rating. These ratings are based on the Sheldon Rarity Scale as depicted in the following table. All rarity estimates are my own and are based on my observations and, in some instances, educated guesses. Few varieties are rated R-6 or above, few are rated R-2, and none are R-1. I will be the first to admit that it will literally take years to establish more accurate rarity ratings for each variety but I believe most will range as listed in the R-3 to R-4 range.

The *rarity rating* I assigned to each die marriage is a single number, which *includes coins* of all grades. In my experience, listing rarity values by grade can lead to misrepresenting the rarity of a die marriage by misquoting grade rarities rather than overall rarities. Naturally, some grades

are rarer than others, specifically uncirculated coins and very low grade 1850-1852 half dollars, but I will leave that study and accompanying condition census listings to others.

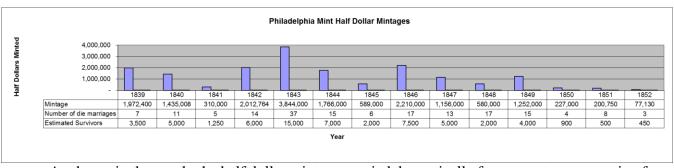
Care must be exercised when trying to relate a die marriage's worth to rarity. There is no direct correlation between value and rarity and trying to correlate the two would produce misleading results. Some die marriages are rare but not noteworthy enough to gain the prominence enjoyed by some more popular rarities. Some major die marriage rarities have little premium because they fall into the "who cares" category. While rare, there may be little or no demand for it. Rarity is only one factor in determining market value.

Rarity Rating	Estimated number of known pieces
R-8	1-3
R-7	4 - 12
R-6	13 - 30
R-5	31 - 75
R-4	76 - 200
R-3	201 - 500
R-2	501 - 1,250
R-1	1,251 or more

If you sum the upper estimates of the known pieces for all the die marriages listed in this Register, the total population of Philadelphia Liberty Seated half dollars from 1839 to 1852 is approximately 67,000. This number equates to less than  $\frac{1}{2}$  of 1% of the original mintage, which is within the generally acceptable attrition estimates.

#### **Miscellaneous Information**

**Philadelphia Mint half dollars.** The figure below depicts the mintages, the number of die marriages found, and my estimate of the number still extant for the Philadelphia Mint half dollars from 1839 to 1852.



As shown in the graph, the half dollar mintages varied dramatically from year to year ranging from approximately 77 thousand to 3.8 million. Various economic developments and, interestingly, Mint procedures influenced these mintage figures.

**Disappearance of silver coinage**. During most of the 1840s and for the first time in the nation's history, the U.S. had a fairly ample supply of circulating coinage. This situation abruptly changed with the discovery of gold in California in 1848. Gold poured into the nation's economy thereby upsetting the gold to silver market ratio. By 1851, the rising value of silver rose to a point where a silver coin's silver content was worth more than the face value (e.g., two silver half dollars were worth \$1.03½ in gold). Consequently, large numbers of U.S. silver coins, mainly quarters and half dollars, were pulled from circulation, hoarded, melted, and/or exported for profit. Coinage with the exception of heavily worn U.S. and Mexican coins, 3-cent pieces, and gold dollars essentially did not circulate. With Congress' inactivity to resolve the worsening chaotic retail trade conditions, the U.S. Mints, which were operating at a net loss in producing silver coins, reduced their silver coinage output because it cost more than their face value to produce and, if released, they quickly disappeared from commerce. Consequently, for a few years beginning in 1850, the half dollar mintage was miniscule. This situation changed for the better in 1853 with the Mint Act of 1853.

Arcing defect on the obverse dies. Many half dollars of this period have an arcing defect from the dentils above Liberty's head. This defect appears on coins dating as late as 1849. There are other defects from the dentils but this one is the most obvious. This arcing defect is not a characteristic of the individual working die but a result of incomplete/incorrect finishing of the working hub; hence, its appearance on many dies of the different dates in this period.



# How To Attribute Your Liberty Seated Half Dollar

Armed with the introductory and the die marriage information contained in this Register, most Philadelphia Mint Liberty Seated Halves can be readily attributed to a correct variety nomenclature and WB- number. Date close up images are displayed at top of each die marriage page because they are position dependent. Additional die diagnostic information and images are contained for the obverse and reverse dies.

At a coin show, you will most likely be able to scrutinize a prospective purchase to determine a correct die marriage. Additionally, with advances in the internet, high speed data downloads, and digital imaging technology, many auction companies depict excellent quality images on their website for upcoming auctions.

With a half dollar of an unknown variety in hand, proceed through the following steps.

Obtain or estimate the date grid location. Compare this measurement to the date grid table contained for the coin's date. This measurement will provide a few obverse die possibilities and you can then check the mintmark position.

Refer your possibilities to each variety description and check the die diagnostics for your coin against those listed for each die marriage.

With a close-up image of half dollar of an unknown variety <u>on the computer screen</u> (e.g., from an auction website), proceed through the following steps.

Estimate the date position of the 1 by using a straight edge such as a piece of page. Compare this measurement to the date grid table contained for the coin's date. This measurement will provide a few obverse die possibilities and you can then check the mintmark position.

Refer your possibilities to each variety description and check the die diagnostics for your coin against those listed for each die marriage.

Both techniques work well. I have personally tested attribution techniques with a coin either in hand or over the internet with the digital archives of a few well known auctions houses. In over 90 per cent of the coins or images checked, I was able to attribute the variety for a high grade (VF+) Liberty Seated half dollar. I hope you have similar successes.

# The Philadelphia Mint Liberty Seated Half Dollar Die Marriages 1839 to 1852

#### 1839

This date is noteworthy for its two major design types, the first of which is unique to 1839.

**No-Drapery** (below Liberty's right elbow) (WB-101<sup>1</sup>). So-called for the lack of three folds below Liberty's right elbow, its design differences are actually more complex. The major difference between

this type and all later dater dated Liberty Seated half dollars is the larger rock to the left of the obverse shield (upon which Liberty *supposedly* rests). The lack of the drapery for which this design type is known is definitely a design feature on this type unlike later date examples of a die state without drapery (drapery polished off the die). Notable examples of the no drapery die state include but are not limited to 1845-O and 1846-O, which are the most famous. I have preached for years against the



emphasis placed on the post-1839 No-Drapery die states. Most dates in the Liberty Seated half dollar series have at least one die marriage that, in a later die state, is without drapery. It does not deserve attention other than casual notice and definitely does not merit a significant price premium as often seen. Breen suggests that these no drapery pieces were struck in August 1839.

At this point, it is useful to mention David W. Lange's theory<sup>2</sup> on what has traditionally been called the "rock." Through keen observation, diligent research, and careful study, Dave proposes this "rock" is not a rock but actually a gown-covered unseen chair or stool. He bases this on the appearance of the wrinkled clothing mass behind Liberty's torso and to the left of the shield and believes this is part of Liberty's gown clumped on a chair. He compares it to some early sketches by William Kneass, Titian Peale, Christian Gobrecht, and Thomas Sully of a seated Liberty including one upon which Liberty rests on an ornate backless chair with the gown piled atop the chair's armrest. I believe Dave's theory has merit mainly because it makes a lot of sense and I never did like the idea that Liberty sat on a rock. In any case, his theory is well worth reading and considering.

**With-Drapery** (below Liberty's right elbow) (WB-102<sup>1</sup>). Later in 1839, the Liberty Seated obverse design was slightly modified to add three folds of drapery below Liberty's right elbow and to reduce the size of the rock upon Liberty rests. These design features are noticeable and must have found favor as they were utilized for the remaining years of the Liberty Seated half dollar design.



<sup>&</sup>lt;sup>1</sup> The Complete Guide to Liberty Seated Half Dollars, Randy Wiley and Bill Bugert, 1993, DLRC, p. 52.

<sup>&</sup>lt;sup>2</sup> Lange, David W. "Upon What Exactly is Liberty Seated?" Gobrecht Journal, July 2012, Volume 38, #114, p. 22-25.

**Shaved rock**. As mentioned in *The Complete Guide to Liberty Seated Half Dollars*, Randy Wiley and I believe the rock (or gown covered chair) was reduced by carving away the design on the master hub to balance the metal flow during coin striking from the addition of the drapery below the elbow. See the overlay of the small over the large rocks in the image at the right; the similarities are noticeable and demonstrate how easily the rock could have been reduced in size without much change in the look and design.

**Rarity comments.** Finding an example of either type is relatively easy as they are common (the combined rarity of all die marriages is Rarity-1 in all grades for each type).



However, some die marriages of both types are rare and will prove a challenge to locate. Fully struck examples of this date are very difficult to locate and should be cherished when found. Typically, most examples of all die marriages are weakly struck with weaknesses on the Liberty's breast, reverse horizontal shield lines, and the eagle's left leg. The No-Drapery type commands a significant price premium as a single year type.

Seven die marriages are known as summarized in the tables below.

Business Strike Mintage	Design Type	Number of Die Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
1,972,400	No-Drapery	4	2	4	2
(for both types)	With-Drapery	3	3	3	(144, 148)

#### 1839 date grid quick reference table

Obverse die date grid	Die Marriage
M3.5, .026"	WB-4
M3.5, .030"	WB-1
M3.5, .030"	WB-6
M3.5, .030"	WB-7
M4, .030"	WB-2
M4, .030"	WB-3
M4, .034"	WB-5

**Open and closed claw**. Various references mention a difference in the eagle's claw on the reverse; the so-called open and closed claw. As Randy and I mention in our 1993 reference, the differences are indicative of differences in die preparation and die states rather than a distinct die design variation. Even with side-by-side comparisons of the 1839 reverse dies, I can find to differences. I went as far as to overlay digital examples of the claws on many 1839s and could find no variations in the style.

#### 1839 Half Dollar Date Positions

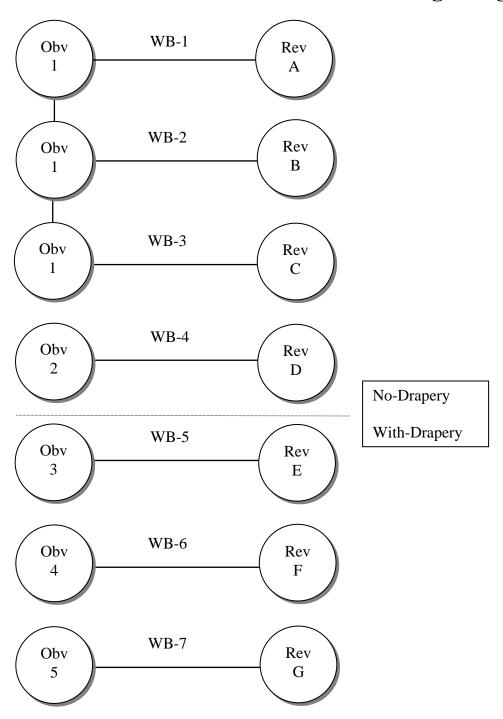


**Open and closed style 9**. Various references mention an open and closed lower loop of the 9. From studying many examples of 1839, I can find no plausible evidence that there is a difference in style. I went as far as to overlay digital examples of the dates on many 1839s and could find no variations in the style of the 9. The closed and open 9 may appear to be so as a result of the amount of force used to punch the digit into the die; more force equals a closed 9 while a lightly punched digit equals an open 9.

Arcing date. Although not readily noticeable without aid, the digits in the date on 1839 half dollars are arcing and the middle two digits are lower than the outer digits. The 1 and 9 are slightly higher than the middle digits 83 while the 1 is tilted to the right. See the image of the date of a WB-2 at the right. The other die marriages in 1839 have a similar look (see Date Positions table above).



# 1839 Half Dollar Die Linkage Diagram



1839 Obverse and Reverse die identification keys		Bisecting die crack	Diagonal (NW to SE) die line in the lower portion of the shield	Radial die crack from dentil at K-3:30	No prominent die diagnostics	Small lump in the eagle's mouth	Two diagonal die lines in the field above (UNI)T(ED)	Small line in the field between (S)TA(TES)	
			A	В	C	D	E	F	G
Liberty has small rust lumps throughout	1		WB-1	WB-2	WB-3				
Two tangential die lines in the rock support behind Liberty's heel	2	No- Drapery				WB-4			
Small lump in the rock support along Liberty's lower gown line	3						WB-5		
Repunching of the digits 139 in the date slightly north and west	4	With- Drapery						WB-6	_
Arcing lathe lines thru Liberty's lower skirt	5								WB-7

#### 1839 WB-1, No-Drapery

#### Obverse 1

No-Drapery from Liberty's right elbow



Date centered (photo)



- Small lump in Liberty's gown loop (photo)
- Liberty has small rust lumps throughout.
- Weakly struck Liberty's foot and rock support

Reverse A



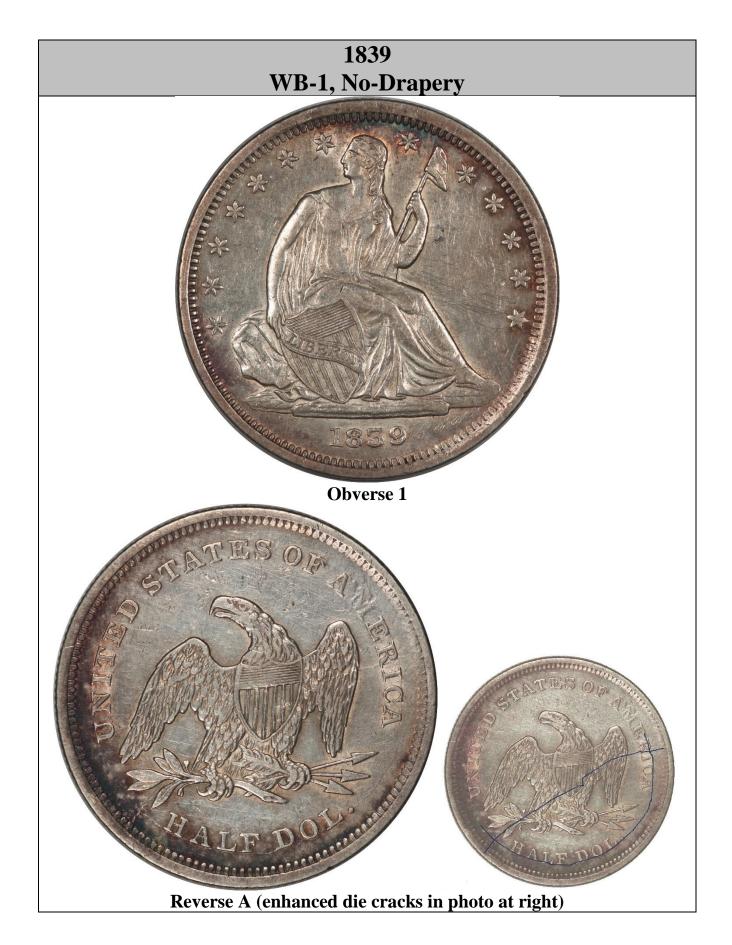
- All examples seen: bisecting die crack from K-3 thru the eagle's right wing, lower shield, eagle's left leg, and olive leaves to rim at K-7. Another arching die crack along the lower edge of the letters of the denomination to the top of the letters (AME)RICA (See photo above and the enhanced die crack diagram on the next page.)
- Double clash in the shield's lower right

This is the first use of this obverse die and only use of this reverse die.

These dies were used to strike the 1839 No-Drapery Proof half dollars, which includes the bisecting reverse die state.

LDS "With-Drapery." A few LDS examples of this die marriage have what appears to be drapery below the elbow on the obverse die. This "drapery" is actually clash lines and can be very deceptive. In 11/2015, I noticed an AU53 TPG 1839 of this die marriage that was mislabeled as a With-Drapery type. The clash lines below the elbow obviously led the graders astray. I have thoroughly studied a "With-Drapery" example and believe this "With-Drapery" die state is actually a remarriage of these dies used after WB-3 was struck and before the dies were clashed. This remarriage would account for the lack of the "drapery" on WB-2 and WB-3. Further study is necessary.

Date grid: M3.5, .030" 148 reeds		Typical diameter = 1.212"		Rarity - 3	
Drapery below elbow: None Foot support:			Weak	Dentils: Obverse - Fu	ll; Reverse - Full
Grade of coin depicted: AU53				Coin from the Bill Bu	gert Collection
Cross reference: WB-101.					Version 82.S



### 1839 WB-2, No-Drapery

#### Obverse 1

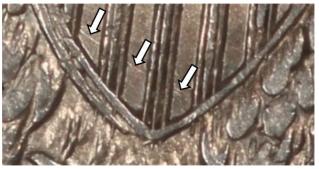
No-Drapery from Liberty's right elbow



- Date slightly right when compared to the other No-Drapery obverse dies (photo)
- No usable die diagnostics seen other than the date position

#### **Reverse B**

Small Letters

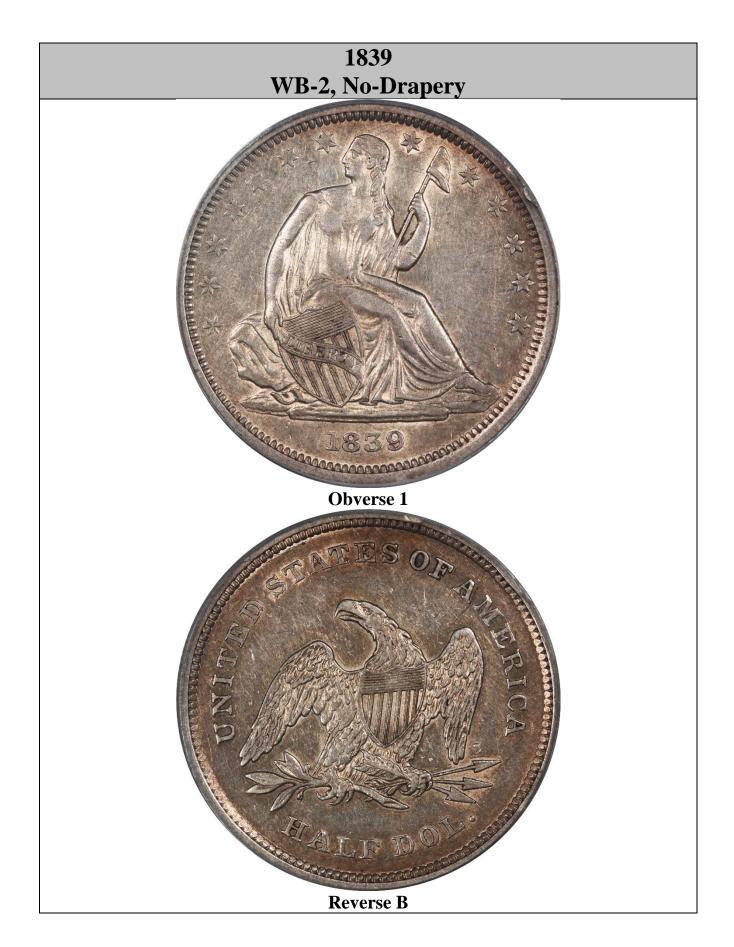


- Diagonal (NW to SE) die line in the lower portion of the shield (photo). Note the vertical shield lines extending into the feathers below the shield.
- This reverse die is transitional with 1840 (Reverse H).

This is the second use of this obverse die and only use of this reverse die in 1839.

The reverse is slightly rotated CCW 13°.

Date grid: M4, .030"	148	148 reeds Typical of		ameter = 1.211"	Rarity - 3	
Drapery below elbow: No	ne	e Foot support: Weak		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: PCGS AU50				Coin from the Bill Bu	gert Collection	
Cross reference: WB-101.					Version 82.S	



#### 1839 WB-3, No-Drapery

#### Obverse 1

No-Drapery from Liberty's right elbow



- Date slightly right (photo)
- The outer tips of the dentils from K-9 to K-11 weaken into the field
- Small rust lumps throughout Liberty

# Reverse C Small Letters



- All examples seen: radial die crack from dentil at K-3:30 along the upper arrowhead tip thru the right wing to the eagle's right leg (photo). (See enhanced die crack diagram on the next page.)
- The outer tips of the dentils from K-6 to K-9 weaken into the field
- Weak vertical shield lines A1-3
- Clash in shield's lower right

This is the third use of this obverse die and only use of this reverse die. The reverse is rotated CCW  $17^{\circ}$ .

Date grid: M4, .030"	148 reeds		Typical diameter = 1.216"		Rarity - 5
Drapery below elbow: None Foot support:			Weak	Dentils: Obverse - Weak; Reverse - Full	
Grade of coin depicted: PCGS XF40				Coin from the Bill Bugert Collection	
Cross reference: WB-101.					Version 82.S



#### 1839 WB-4, No-Drapery

#### **Obverse 2**

No-Drapery from Liberty's right elbow



• Date right (photo)



 Two die lines in the rock support behind Liberty's heel: one horizontal and another diagonal (NE to SW) (photo)

#### **Reverse D**

Small Letters

No usable die diagnostics seen

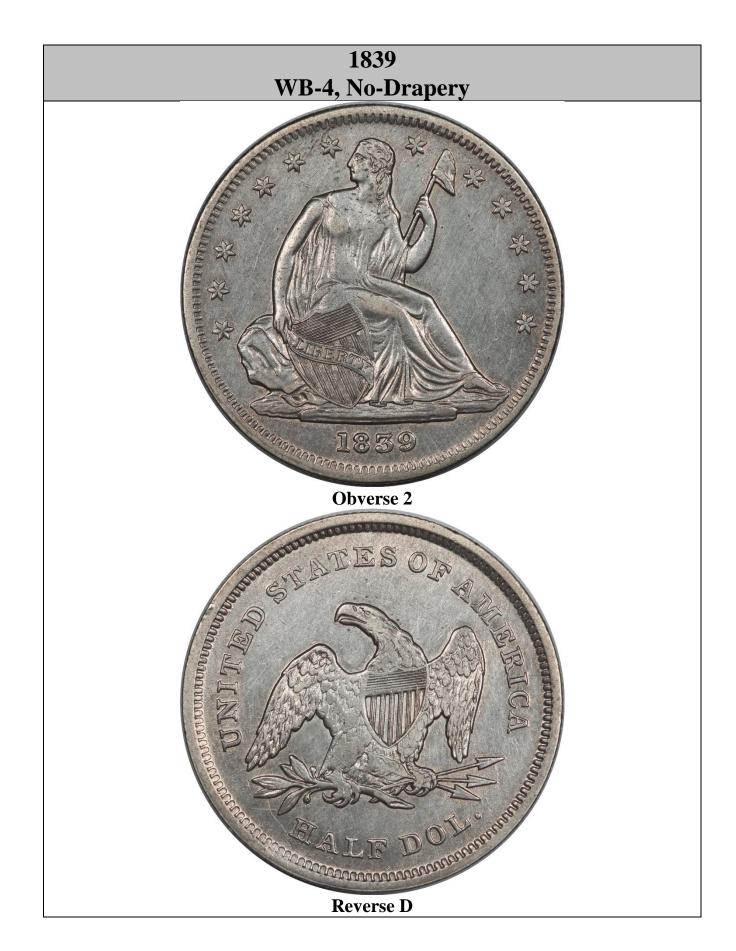
This is the only use of this obverse die and only use of this reverse die.

Date grid: M3.5, .026" 148 reeds Typical diameter = 1.207" Rarity - 4

Drapery below elbow: None Foot support: Weak Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: AU50

Cross reference: WB-101. Version 82.S



## 1839 WB-5, With-Drapery

Obverse 3
With-Drapery below Liberty's elbow



 Date low (photo) with the upper loop of the 8 repunched west



- EDS only: small lump in the rock support along Liberty's lower gown line (photo)
- LDS: clash in the drapery below Liberty's right elbow

Reverse E
Small Letters

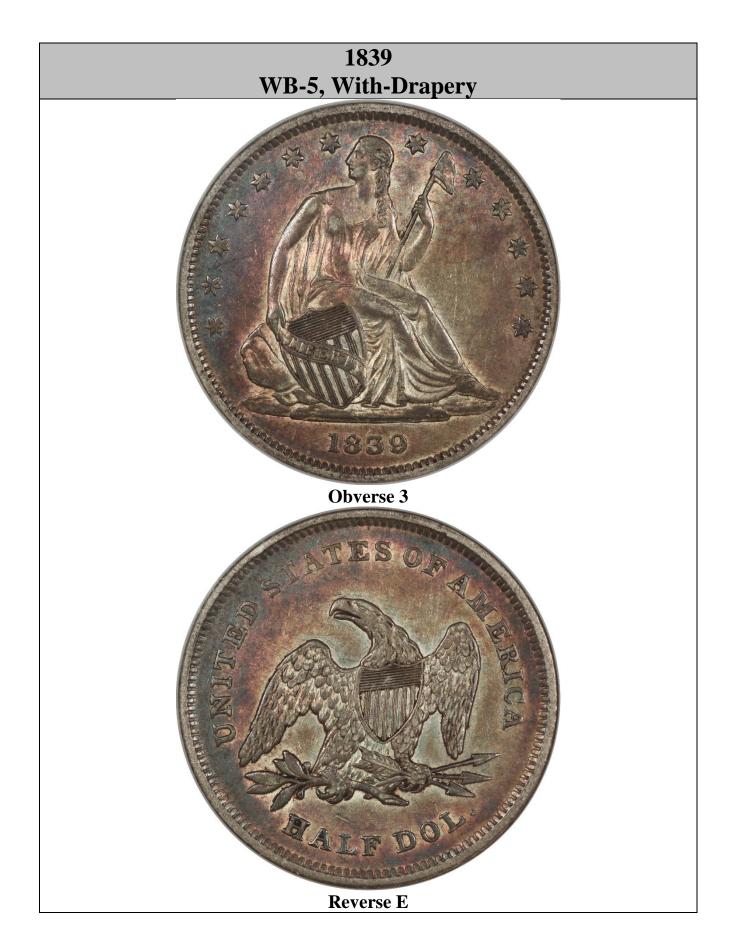


- Small lump in the eagle's mouth (photo)
- LDS: clash in the shield's lower right

This is the only use of this obverse die and only use of this reverse die.

Some examples seen have the reverse rotated CCW 10°.

Date grid: M4, .034"	148	reeds Typical diameter = 1.207"		Rarity - 3	
Drapery below elbow: Ful	1	Foot support:	Weak	Dentils: Obverse - Fu	ll; Reverse - Full
Grade of coin depicted: A	NAC	S SWH XF45		Coin from the Bill Bu	gert Collection
Cross reference: WB-102.					Version 82.S



## 1839 WB-6, With-Drapery

#### **Obverse 4**

With-Drapery below Liberty's elbow



• Date centered with repunching of the digits 139 in the date slightly north and west (photo). Note also the radial die lines above the dentils below the 18.



• EDS only: horizontal die lines along the dentils at K-5 and from the top to the dentils (photo)



- MDS and LDS: outside clash appears as an extra drapery line (photo)
- Longacre effect doubling on all stars

Reverse F
Small Letters



• Two diagonal die lines in the field above (UNI)T(ED) (photo). These die lines are weak but visible on LDS coins. A shorter and weaker line can be found in the field from the dentil towards (O)F.

This is the only use of this obverse die and only use of this reverse die.

Date grid: M3.5, .030" | EDS: 148 reeds | Typical diameter = 1.202" | EDS: Rarity - 3 | LDS: Rarity - 3

Drapery below elbow: Full	Foot support: Weak	Dentils: Obverse - Full; Reverse - Full
Grade of coin depicted: AU50		Coin from the Bill Bugert Collection
Cross reference: WB-102.		Version 82.S



## 1839 WB-7, With-Drapery

### **Obverse 5**

With-Drapery below Liberty's elbow



• Date centered (photo). Very high grade examples show a very minor repunching to the left on the 3 as evidenced on the lower outside right edge of the 3.



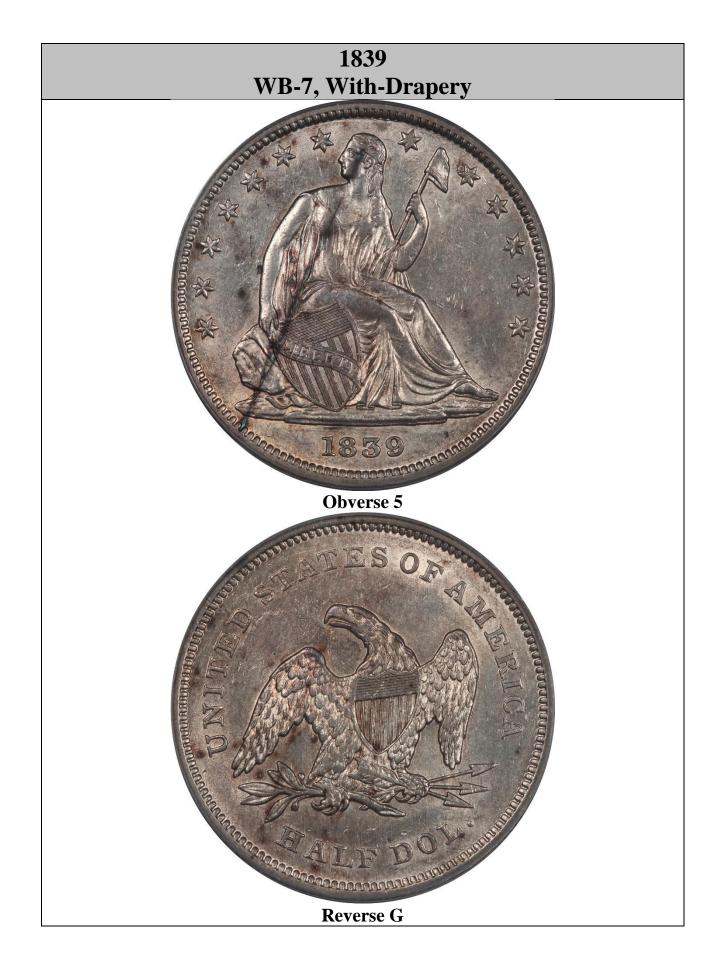
- Arcing lines thru Liberty's lower skirt (photo)
- Tiny diagonal (NE to SW) die lines from Liberty's foot into the rock support

# Reverse G Small Letters



- Small apostrophe shaped line in the field between (S)TA(TES) (photo)
- Weak clash in the shield's lower right

This is the only use of this obverse die and only use of this reverse die.						
Date grid: M3.5, .030"	148 r	reeds	Typical di	ameter = 1.200"	Rarity - 3	
Drapery below elbow: Fu	11	Foot support:	Weak	Dentils: Obverse - Ful	l; Reverse - Full	
Grade of coin depicted: A	.U58			Coin from the Bill Bu	gert Collection	
Cross reference: WB-102	_				Version 82.S	



### 1840

Not including the proof, eleven die marriages are known as depicted in the following table.

Business Strike Mintage	Design Type	Number of Die Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
1,435,008	All - Small Letters Reverse	11	7	10	3 (145, 146, 148)

**1840 Medium Letters Reverse.** The periodically listed and so-called "1840 Medium Letters" reverse half dollar is actually a New Orleans Branch Mint product struck from a left over 1839 bust reverse die (without a mintmark). See my Volume III for detailed information on this die design type and the two die marriages.

**Open and closed claw**. Various references mention a difference in the eagle's claw on the reverse; the so-called open and closed claw. As Randy and I mention in our 1993 reference, the differences are indicative of differences in die preparation and die states rather than a distinct die design variation. Even with side-by-side comparisons of the 1840 reverse dies, I can find no differences. I went as far as to overlay digital examples of the left and right claws on many 1840s and could find no variations in the style (see open and closed claw overlaid images below).



1840 WB-8 claw image overlaid on 1840 WB-9 1840 WB-9 claw image overlaid on 1840 WB-8 Left claw



Right claw

1840 date grid quick reference table

Obverse die date grid	Die Marriage
M3.2, .036"	WB-9
M3.5, .028"	WB-11
M3.5, .030"	WB-1
M3.5, .030"	WB-2
M3.5, .032"	WB-7
M3.5, .033"	WB-8
M3.5, .034"	WB-4
M3.5, .034"	WB-5
M3.7, .031"	WB-6
M4, .030"	WB-10
M4, .032"	WB-3

### **1840 Half Dollar Date Positions**



Obverse 1, WB-1 Repunched 40



Obverse 1, WB-2 LDS without Repunched 40



Obverse 2, WB-3 Triple Punched 0



Obverse 3, WB-4, 5



Obverse 4, WB-6, 7 Repunched 8



Obverse 5, WB-8, 9 Repunched 1

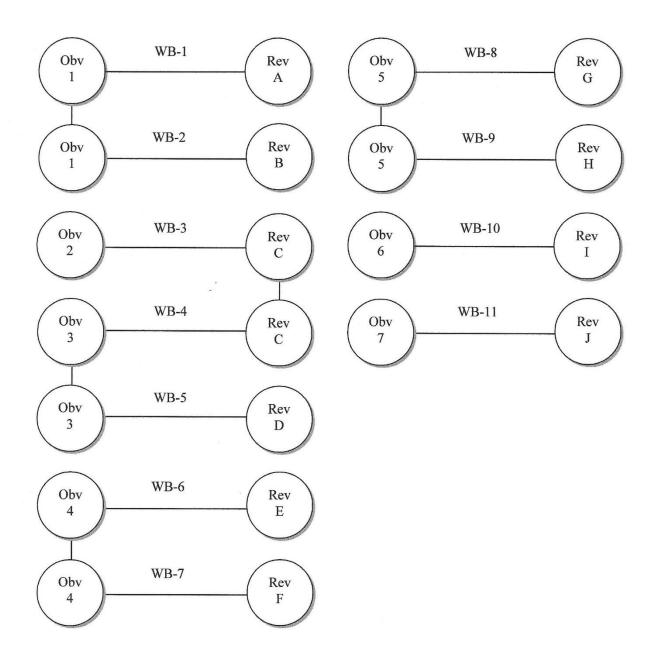


Obverse 6, WB-10 **Doubled Date** 



Obverse 7, WB-11

# 1840 Half Dollar Die Linkage Diagram



1840 Obverse an Reverse di identification keys	e	No usable die diagnostics other than die cracks	Die lines from the dentils above (STATE)S OF	Diagonal die lines recessed areas of the lower shield	Short die lines from the dentils above UNIT(ED)	Die rust in the feathers below the lower shield tip	Arcing die line thru (UNIT)ED ST(ATES)	Wavy die line to the left of the lower shield	No usable die diagnostics other than die cracks	No usable die diagnostics other than die cracks	Many small diagonal die lines from the dentils above (AME)RICA
		A	В	C	D	${f E}$	$\mathbf{F}$	G	H	I	J
Repunched 40	1	WB-1	WB-2								
Triple Punched 0	2			WB-3							
Triple Punched 0  Date slants up slightly to the right	3			WB-3 WB-4	WB-5						
Date slants up					WB-5	WB-6	WB-7				
Date slants up slightly to the right	3				WB-5	WB-6	WB-7	WB-8	WB-9		
Date slants up slightly to the right Repunched 8	3 4				WB-5	WB-6	WB-7	WB-8	WB-9	WB-10	

## 1840 WB-1, Repunched 40

### Obverse 1



• Date centered. EDS coins only: (18)40 repunched north and northwest (photo). The repunching fades away with die state.



• All die states: small lump on Liberty's neck along the hairline (photo)



- EDS to MDS only: horizontal die lines in the field near Liberty's right foot and rock support (photo)
- Clash in the drapery below Liberty's right elbow and in the field to the right of the drapery

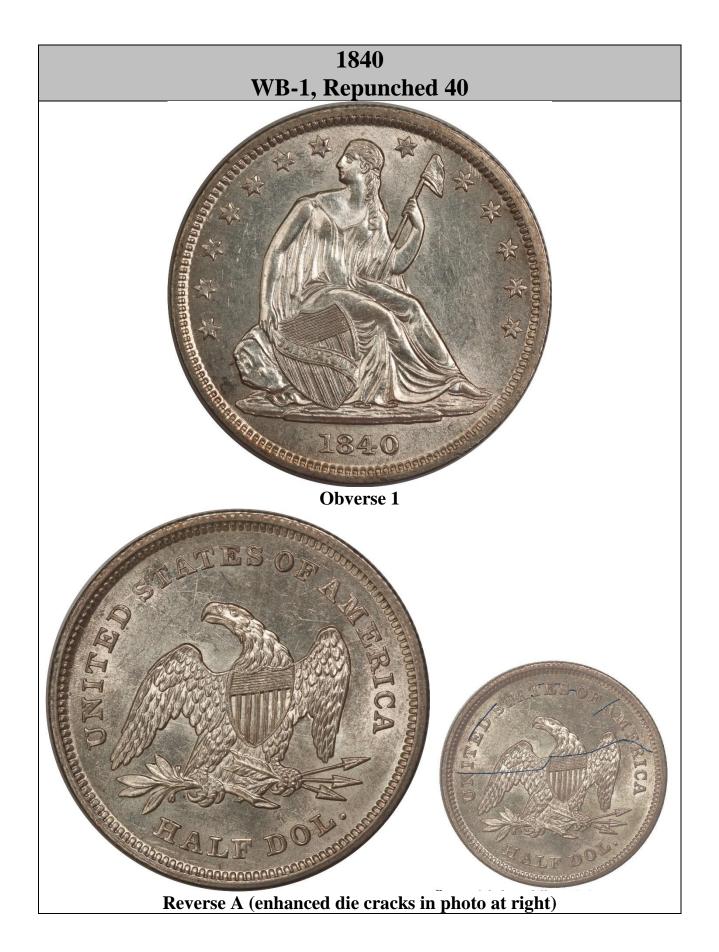
### Reverse A

Small Letters

- MDS-LDS coins: extensive very weak die cracks including a bisecting die crack from K-9 to K-3 (See enhanced die crack diagram on the next page.)
   The bisecting die crack starts at K-3.
- Clash in shield's lower right

This is the first use of this obverse die and only use of this reverse die.

Date grid: M3.5, .030"	14	5 reeds Typical diameter = 1.213"		Rarity - 2	
Drapery die state: Full		Foot support: Full Dentils: Obverse - Full		pport: Full Dentils: Obverse - Full; Reverse - Fu	
Grade of coin depicted: M	IS64			Coin from the Randy	Wiley Collection
Cross reference: WB-102.					Version 82.S



### 1840 WB-2

### Obverse 1



 Date centered (photo). The repunching on the (18)40 seen on the previous use of this die (WB-1) is polished away and not visible on this die marriage.



 All die states: small lump on Liberty's neck along the hairline (photo)

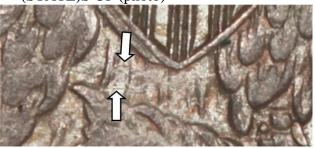


• Rare LDS only: "Checkmark" shaped die crack from the head through the cap to the rim above the 9<sup>th</sup> star (photo). On low-grade coins, this die crack appears cud-like.

# Reverse B Small Letters



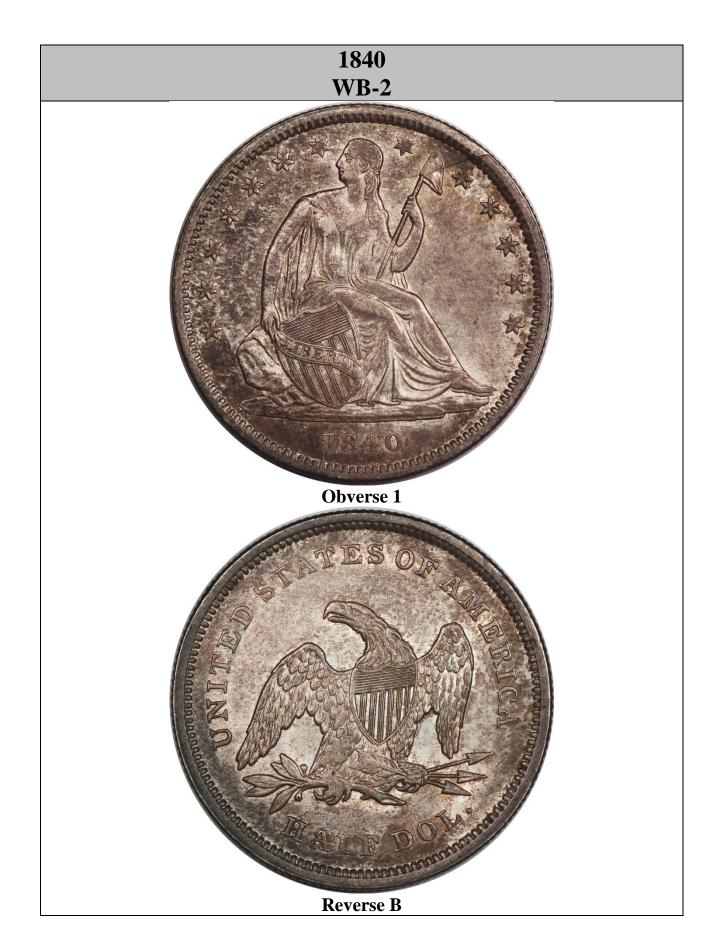
• All die states: die lines from the dentils above (STATE)S OF (photo)



- Horizontal die lines in the eagle's feathers below the shield (photo)
- All die states seen: clash in the shield's lower right
- The eagle's head and left leg are typically softly struck.

This is the second use of this obverse die and only use of this reverse die. Some EDS and MDS coins have a reverse rotated 14° CCW or 10° CW.

Date grid: M3.5, .030" 145 rd		5 reeds	Typical diameter = 1.215"		$er = 1 \ 215$ "	EDS: Rarity - 3
Zuit griu. Tizie, tees		0 10003	1 J P 1 W		1.210	LDS with crack: Rarity - 5
Drapery die state: Full		Foot suppo			erse - Full; Reverse - Full	
Grade of coin depicted: E	DS	- PCGS XF	45	EDS	Coin from the	Bill Bugert Collection
L	DS	- AU58		LDS	Coin from the	Randy Wiley Collection
Cross reference: WB-102						Version 82.S



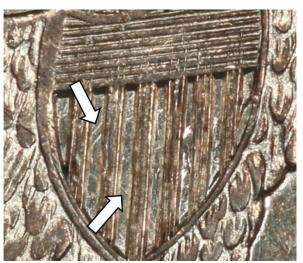
## 1840 WB-3, Triple Punched 0

Obverse 2



- Date positioned slightly right with triple punched (184)0 (photo). The 0 is repunched both north and southeast (EDS shown in photo).
- Horizontal die lines from the shield's lower right into Liberty's gown
- Weak arcing lines thru Liberty's lower skirt

# Reverse C Small Letters



- EDS only: diagonal die lines recessed areas of the lower shield (photo)
- All examples seen: weakly struck eagle's head
- LDS only: weak bisecting die crack from K-7 to K-12 (See enhanced die crack diagram on the following page.)
- All die states seen: clash in shield's lower right

This is the only use of this obverse die and first use of this reverse die. Some examples have a reverse rotated CCW 15°.

Date grid: M4, .032"	14	5 reeds	Typical diameter = 1.215"		Rarity - 3
Drapery die state: Full		Foot support: F	ull Dentils: Obverse - Full		ll; Reverse - Full
Grade of coin depicted: A	U53	proof-like and A	U53	Coins from the Bill B	ugert Collection
Cross reference: WB-103.					Version 82.S



### 1840 WB-4

### Obverse 3



• Date slants up slightly to the right (photo)



- Prominent arcing lines thru Liberty's torso, lower skirt, and shield (photo)
- All examples seen: die crack from field adjacent to rock to star 1 (See enhanced die crack diagram on the following page.)

### **Reverse C**

Small Letters

- All examples seen: weakly struck eagle's head
- Weak bisecting die crack from K-7 to K-12 (See enhanced die crack diagram on the following page.)
- Clash in shield's lower right

This is the first use of this obverse die and second use of this reverse die.

Date grid: M3.5, .034"	14	8 reeds	Typical diameter = 1.216"		Rarity - 4
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Fu	ll; Reverse - Full
Grade of coin depicted: M	IS62	2		Coin from the Randy	Wiley Collection
Cross reference: WB-101.	,				Version 82.S



## 1840 WB-5

### Obverse 3



• Date slants up slightly to right (photo)



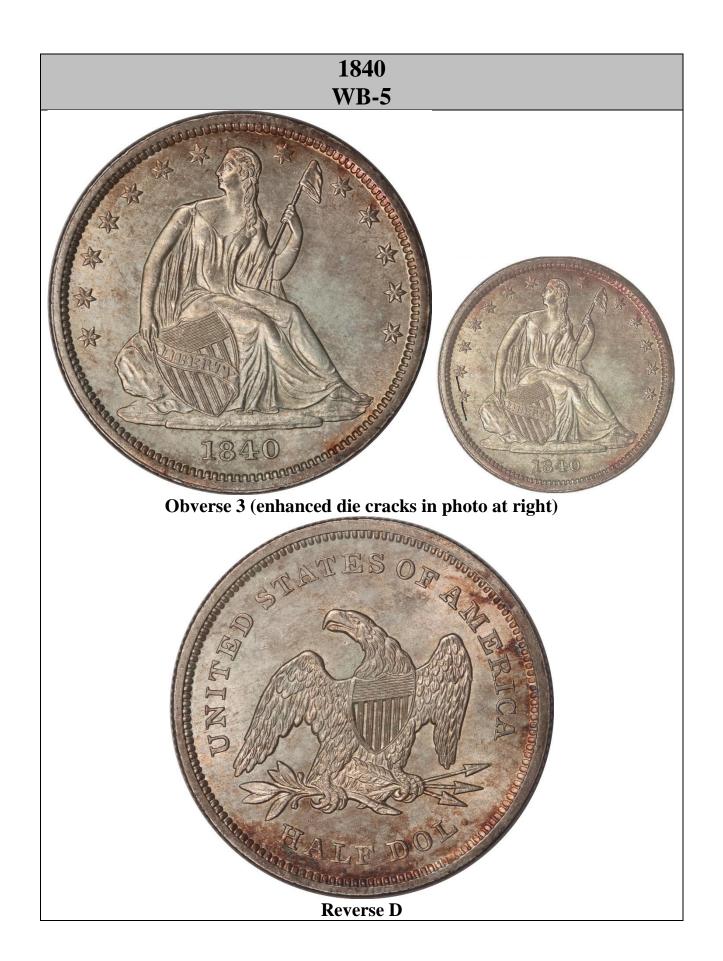
- Prominent arcing lines thru Liberty's torso, lower skirt, and shield (photo)
- Die crack from field adjacent to rock to star 1 (See enhanced die crack diagram on the following page.)

# Reverse D Small Letters



 Short die lines from the dentils above UNIT(ED) (photo). Additional weaker die lines from the dentils below (DOL).

This is the second use of this obverse die and only use of this reverse die.						
Date grid: M3.5, .034"	14	8 reeds	Typical di	ameter = 1.219" Rarity -		
Drapery die state: Full		Foot support: F	Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: M	S64			Coin from the Randy	Wiley Collection	
Cross reference: WB-101.					Version 82.S	

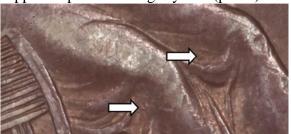


## 1840 WB-6, Repunched 8

### Obverse 4



• Date centered with repunching of the outside upper loop of the 8 slightly east (photo)



 Two small lumps in Liberty's gown in the recessed area between Liberty's knees; others below Liberty's left knee (photo)



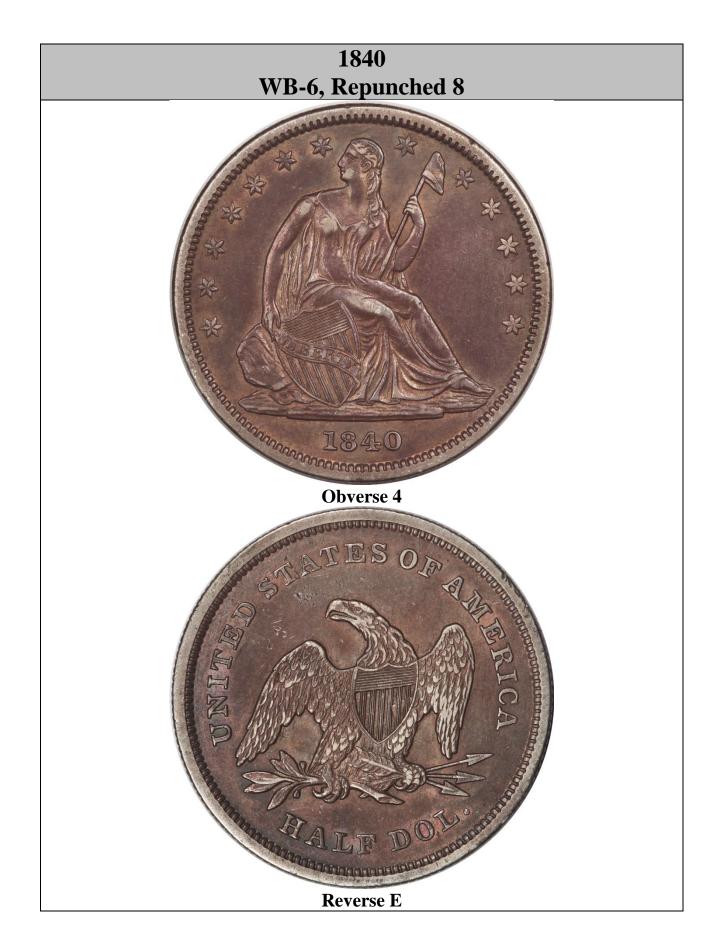
 Prominent arcing lathe lines thru Liberty's torso, lower skirt, and shield (photo)

# Reverse E Small Letters



- Die rust in the feathers below the lower shield tip so much so that the feathers appear merged (photo)
- Clash in shield's lower right

torso, rower skirt, and sincid (photo)						
This is the first use of this obverse die and only use of this reverse die.						
Date grid: M3.7, .031"	14	8 reeds	Typical diameter = 1.218"		Rarity - 4	
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Fu	ll; Reverse - Full	
Grade of coin depicted: X	F45			Coin from the Randy	Wiley Collection	
Cross reference: WB-unlis	sted	•			Version 82.S	

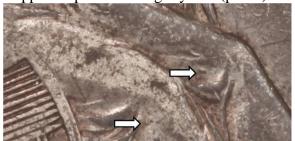


## 1840 WB-7, Repunched 8

Obverse 4



 Date centered with repunching of the outside upper loop of the 8 slightly east (photo)



• Two small lumps in Liberty's gown in the recessed area between Liberty's knees; others below Liberty's left knee (photo)



• Prominent arcing lathe lines thru Liberty's torso, lower skirt, and shield (photo)

Reverse F
Small Letters



- EDS only: arcing die line thru (UNIT)ED ST(ATES) (photo)
- EDS only: tiny radial die polish lines from the dentils from K-6 to K-9
- Clash in shield's lower right

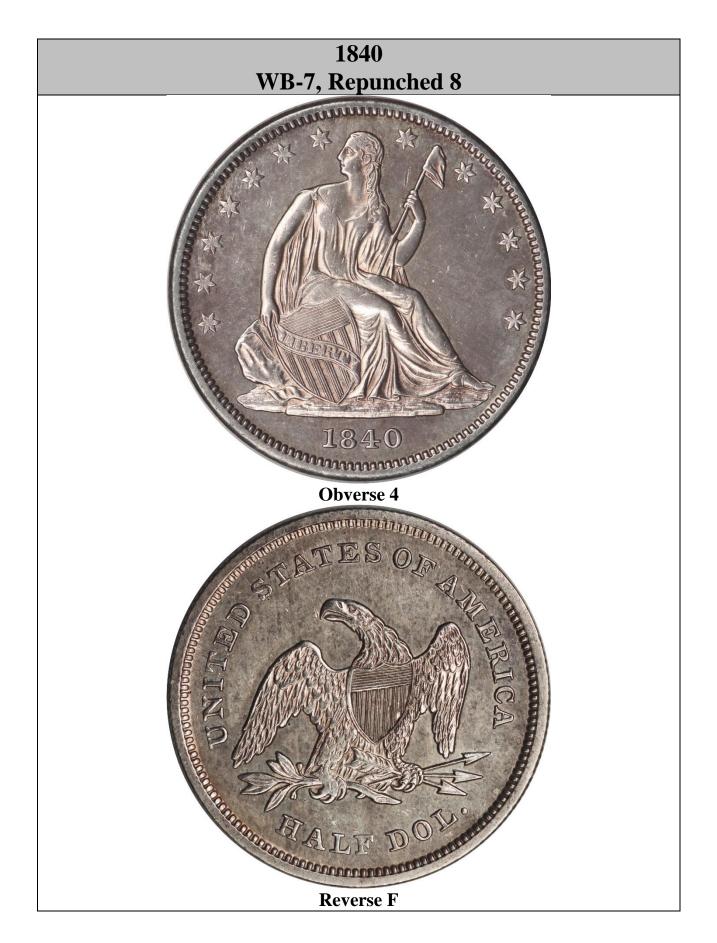
This is the second use of this obverse die and only use of this reverse die.

Date grid: M3.5, .032" | 148 reeds | Typical diameter = 1.212" | Rarity - 3

Drapery die state: Full | Foot support: Full | Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: EDS - MS62 | EDS coin from the Randy Wiley Collection | LDS - PCGS XF40 | LDS coin from the Bill Bugert Collection

Cross reference: WB-Unlisted. Version 82.S



# 1840 WB-8, Repunched 1

Obverse 5



Date centered (photo) with 1 repunched south.
 Weak die crack along the base of the digits of the date

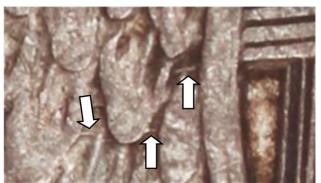


• Prominent arcing lines thru Liberty's lower skirt (photo)



• Tiny horizontal line in the rock support behind Liberty's heel (photo)

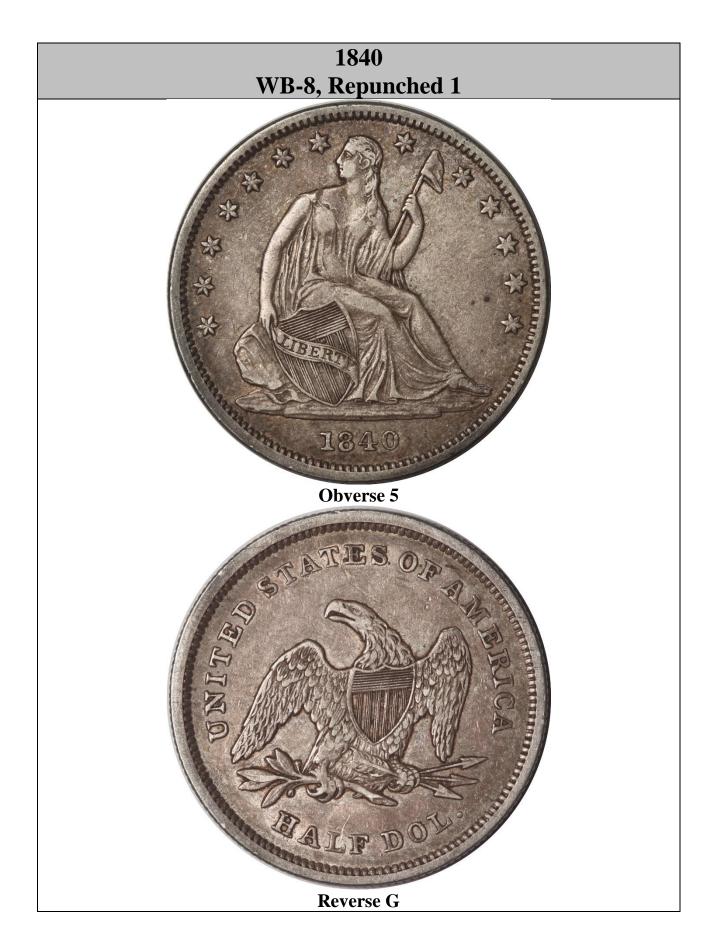
Reverse G
Small Letters



• Wavy die line to the left of the lower shield (photo). Note also the lower horizontal line extended into the eagle's left wing.

This is the first use of this obverse die and only use of this reverse die.

This is the first use of this octored are that only use of this fet else are.							
Date grid: M3.5, .033"	14	148 reeds Typical		ameter = 1.214"	Rarity - 4		
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: PCGS XF40			Coin from the Bill Bu	gert Collection			
Cross reference: WB-Unlisted.				Version 82.S			



### 1840 WB-9, Obverse Die Crack





- Date centered (photo) with repunching on the 1 visible in the previous use of this die (WB-8) not visible. The die crack along the base of the date now extends along the left edge of the rock support to the dentils left of the rock. (See enhanced die crack diagram on following page.)
- Arcing lines thru Liberty's lower skirt Date centered
- Tiny horizontal line in the rock support behind Liberty's heel



• Very rare LDS: die crack from the dentils above star 4 thru stars 5-7 to the dentils above star 7 (photo)

### **Reverse H**

Small Letters

- The diagonal die line in the lower portion of the shield seen on the previous use of this die (1839 WB-2) is now very weak.
- This reverse die is transitional with 1839 (Reverse B).

This is the second use of this obverse die and only use of this reverse die.

Date grid: M3.2, .036"

148 reeds

Typical diameter = 1.213"

EDS: Rarity - 3
LDS with crack: Rarity - 6

Drapery die state: Full

Foot support: Weak

Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: EDS - NGC AU58
LDS - F12

EDS coin from the Randy Wiley Collection
LDS coin from the Bill Bugert Collection

Cross reference: WB-101. Version 82.S



## 1840 WB-10, Doubled Date

### Obverse 6

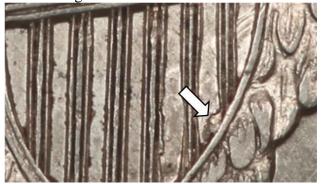


- Date more left and lower than other obverse dies of this date. All examples seen have the digits 18 repunched east and the 40 with slight doubling on the crossbar of the 4 and 0 repunched south (photo).
- Weak clash in the drapery below Liberty's right elbow

### Reverse I

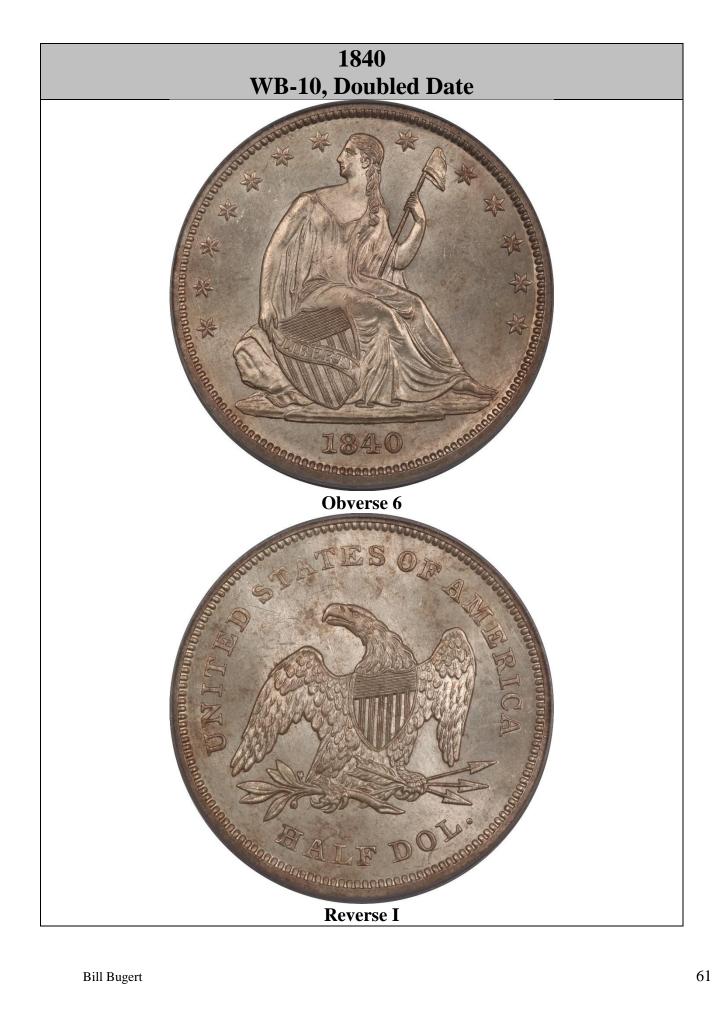
Small Letters

 All examples seen: die clash in the shield's lower right



- LDS only: large lump along the inside lower right edge of the shield. Note also the clash and crumbling vertical shield line D-3 (photo).
- LDS only: few rust lumps in the eagle's upper left wing

This is the only use of this obverse die and only use of this reverse die.							
Date grid: M4, .030"	14	6 reeds	s Typical diameter = 1.210"			Rarity - 3	
Drapery die state: Full	Orapery die state: Full Foot support: Full				Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: EDS - PCGS MS64 OGH			GH	EDS coin from the Randy Wiley Collection			
LDS - AU50			LDS coin from the Bill Bugert Collection				
Cross reference: WB-104.					Version 82.S		



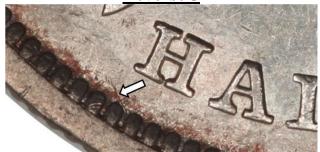
# 1840 WB-11

Obverse 7

1-8-4-0

• Date slants up slightly to the right with minor repunching on the (1)8(40) showing on the outside upper loop and inside lower left edge of the 8 (photo)

Reverse J

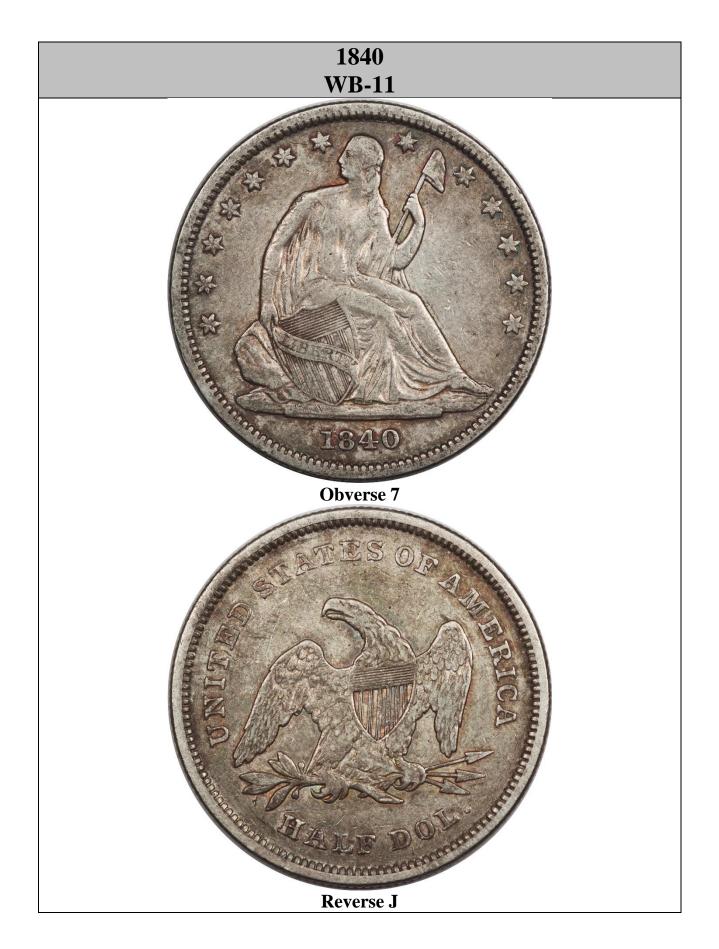


 Diagonal die line from dentil below H(ALF) towards the olive leaves (photo)



- Many small diagonal die lines from the dentils above (AME)RICA (photo)
- Clash in shield's lower right

This is the only use of this obverse die and only use of this reverse die.							
Date grid: M3.5, .028"	14	6 reeds	Tyl	pical di	ameter = 1.209"	Rarity - 3	
Drapery die state: Full		Foot support: Full			Dentils: Obverse - Full; Reverse - Full		
I Grade of coin denicted: X H/III and PL GX X H/III			Coins from the Randy Wiley and Bill Bugert Collections				
Cross reference: WB-101.					Version 82.S		



### 1841

With a low mintage, 1841 is a better date, is popular with collectors, and has only a few die marriages, all of which are available with some searching. There is a repunched date obverse die (the 1841 proof only obverse die also has a repunched date but different from the WB-1 circulation strike) and all die marriages are die linked and readily identifiable by die defects. As with 1839 and 1840, all known reverse dies for this date have small letters.

Weakly struck examples of this date are common with characteristic soft or flat details on Liberty's head and breast and on the eagle's left leg and neck.

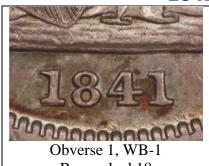
Five die marriages are known as depicted in the tables below:

Mintage	Number of	Obverse	Reverse	Reed Counts
	Die Marriages	Dies	Dies	Known
310,000	5	3	3	2 (146, 148)

### 1841 date grid quick reference table

Obverse die date grid	Die Marriage
M3.5, .029"	WB-1
M4.5, .032"	WB-5
M4.5, .034"	WB-2
M4.5, .034"	WB-3
M4.5, .035"	WB-4

### **1841 Half Dollar Date Positions**



Repunched 18

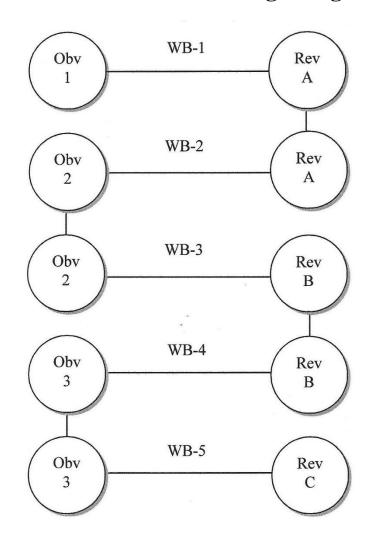


Obverse 2, WB-2, 3



Obverse 3, WB-4, 5

# 1841 Half Dollar Die Linkage Diagram



1841 Obverse and Reverse dic identification keys	Lowest horizontal shield line extended (twice) into the eagle's left wing	No usable die characteristics seen	No usable die characteristics seen other than die cracks	
		$\mathbf{A}$	В	C
18(41) repunched north	1	WB-1		
One horizontal die line in Liberty's	2	WB-2	WB-3	
gown above the shield tip	W D-Z	W D-3		
No usable die characteristics seen			WB-4	WB-5
other than die cracks	3		W D-4	W D-3

## 1841 WB-1, Repunched 18

#### Obverse 1



• Date slightly higher than obverses 2 and 3 (photo). The figures 18(41) are repunched north; the 1 shows repunching along the base and the 8 has less visible repunching along the outside lower loop (photo below)

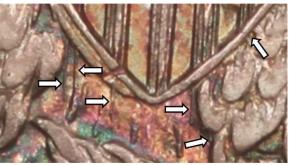




- Many short diagonal die lines from the dentils into the field from K-4 to K-6 (photo); others at star 13.
- LDS: extensive die cracks around most of the circumference (See enhanced die crack diagram on the next page.)

### Reverse A

Small Letters



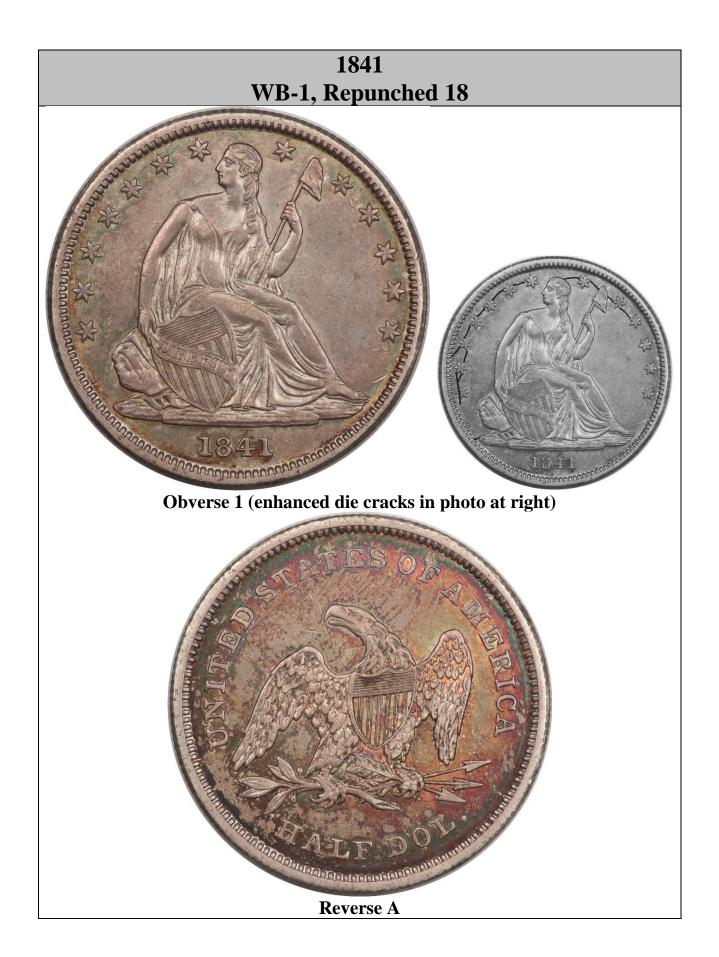
 Many shield lines extended into the eagle's feathers below the shield (photo)



- Lowest horizontal shield line extended (twice) into the eagle's left wing (photo)
- Clash in shield's lower right

This is the only use of this obverse die and first use of this reverse die.

This is the only use of this obverse the third that use of this feverse the.							
Date grid: M3.5, .029"	14	6 reeds	Typical diameter = 1.210"		ameter = 1.210"	Rarity - 3	
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Full; Reverse - Full		ll; Reverse - Full	
Trade of coin depicted. Puts X Bus and ATISS			\ I	XF45 coin from the Bill Bugert Collection AU55 coin from the Randy Wiley Collection			
Cross reference: WB-102.						Version 82.S	

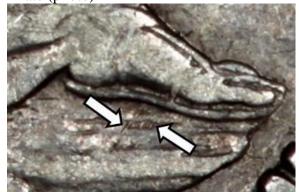


## 1841 WB-2

#### Obverse 2



Date (photo)

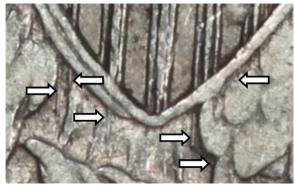


Three diagonal and parallel lines (NE to SW) in the foot support from Liberty's foot (photo). Other weaker scattered die lines in the same area of the rock support.



- One horizontal die line in Liberty's gown above the shield tip (photo)
- Weak clash in the drapery below Liberty's elbow

# Reverse A Small Letters



 Many shield lines extended into the eagle's feathers below the shield (photo)



- Lowest horizontal shield line extended (twice) into the eagle's left wing (photo)
- Clash in shield's lower right

This is the first use of this obverse die and second use of this reverse die.

Date grid: M4.5, .034"	e grid: M4.5, .034" 146 reed		Typical di	ameter = 1.209"	Rarity - 3
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PCGS XF45				Coin from the Bill Bu	gert Collection
Cross reference: WB-101, Beistle-1B.					Version 82.S



# 1841 WB-3

#### Obverse 2



Date (photo).



Three diagonal and parallel lines (NE to SW) in the foot support from Liberty's foot (photo). Other weaker scattered die lines in the same area of the rock support.



• One horizontal die line in Liberty's gown above the shield tip, now slightly weaker than on WB-2 (photo).

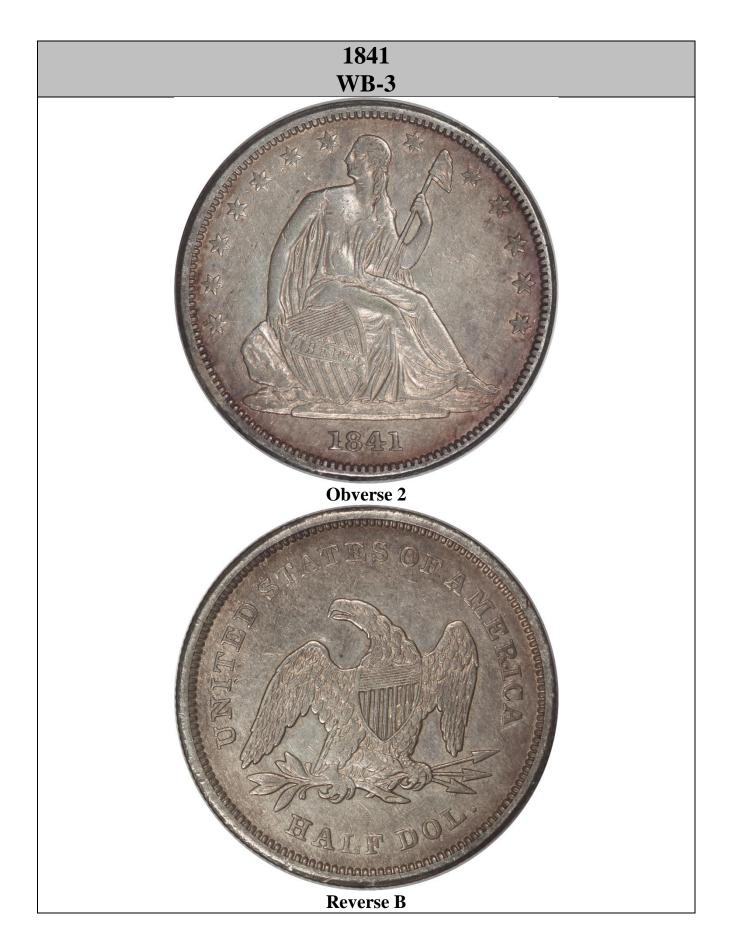
### Reverse B

Small Letters

- Clash in shield's lower right
- No usable die characteristics seen

This is the second use of this obverse die and first use of this reverse die.

Date grid: M4.5, .034" 14		6 reeds	Typical diameter = 1.212"		Rarity - 4
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45				Coin from the Randy	Wiley Collection
Cross reference: WB-101.					Version 82.S



# 1841 WB-4

#### Obverse 3



Date (photo)



- Weak die lines to dentil from the tip of Liberty's foot (photo)
- EDS: uncracked. LDS: die crack along the base of the digits of the date and from stars 5-7 to head to star 8 to cap. (See enhanced die crack diagram on next page.)

### **Reverse B**

Small Letters

- Clash in shield's lower right
- No usable die characteristics seen other than die cracks



 LDS: weak die crack along the top of letters (UN)ITED (photo)

This is the first use of this obverse die and second use of this reverse die.

Date grid: M4.5, .032" 14		18 reeds Typical diam		ameter = 1.220"	Rarity - 3	
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS62				Coin from the Randy	Wiley Collection	
Cross reference: WB-102.					Version 82.S	



## 1841 WB-5

#### Obverse 3



- Date (photo)
- The weak die lines to dentil from the tip of Liberty's foot seen on the first use of this die (WB-4) are not now visible.
- All die states: die crack along the base of the digits of the date that slants down to dentils at right and another from stars 5-7 to head to star 8 to cap. Another diagonal crack in the field to the left of the date. (See enhanced die crack diagram on next page.)

### **Reverse C**

Small Letters

- LDS: clash in shield's lower right (not seen in photo)
- No usable die characteristics seen other than the die crack listed below
- All die states: weak die crack along the top of letters (UN)ITED

This is the second use of this obverse die and only use of this reverse die.							
Date grid: M4.5, .032" 148 reeds			Typical di	ameter = 1.220"	Rarity - 3		
Drapery die state: Full Foot support:			ull	Dentils: Obverse - Fu	ll; Reverse - Full		
Grade of coin depicted: M	IS63		Coin from the Randy	Wiley Collection			
Cross reference: WB-101.				Version 82.S			





Obverse 3 (enhanced die cracks in photo at right)



**Reverse** C

### 1842

With a fairly high mintage date and ready availability, there is plenty to interest any collector of this date including two date sizes, two reverse letter sizes, repunched dates, doubled die reverse, errant date locations, and heavily cracked dies. Collecting all these die marriages especially the small letters reverse will be very challenging.

Fourteen die marriages are known as depicted in the tables below.

Mintage	Number of	Obverse	Reverse	Reed Counts
	Die Marriages	Dies	Dies	Known
2,012,764	14	7	12	2 (145, 148)

**1842 Small Date, Small Letters Reverse.** It is worthwhile briefly discussing some background on this die marriage, WB-1. This major variety with the small letters reverse was unknown when Randy and I authored our *The Complete Guide to Liberty Seated Half Dollars* in 1993. Although it was unknown, we hypothesized its existence as follows on page 62: "It is entirely possible that a small date obverse could be paired with a small letter Philadelphia Mint reverse (similar to that found on all 1841 half dollars and some 1842 New Orleans Branch Mint coins); this combination is presently unknown and if found, would be extremely rare." That turned out to be an understatement – after 23 years, only four examples are now known with many collectors actively searching for it. LSCC expert, dealer, collector, and good friend Brian Greer discovered this variety (he also found the G6 example) in early 1998. Since the first, three others have been verified. A few others are likely awaiting discovery by the lucky and knowledgeable searcher.

**1842 Small versus Medium Date Attribution - Serif on the 4.** Periodically, I will see misidentifications of the small and medium date sizes for this date. Even without having examples of the two date styles in front of you, a foolproof method of correctly identifying the two date sizes is to look at the serif of the 4. The small date has no serif while the medium date has a serif. See the images below: the date size differences are readily apparent with side-by-side comparison but so is the serif on the 4 on the medium date.





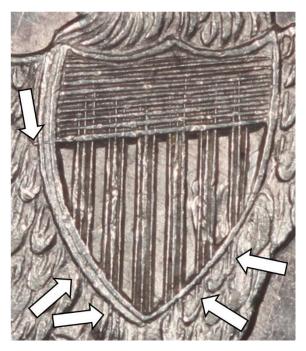


1842 Medium Date (with serif)

<sup>&</sup>lt;sup>3</sup> McCloskey, John M. "1842 Small Date Small Letters Reverse Discovered." <u>Gobrecht Journal</u> #72 (July 1998): 29-31.

**1842 Reverse Shield Lines.** Most reverse shield lines for 1842 have what appear to be usable die diagnostics.

- a) The lowest horizontal shield line extends outside the shield's edge into the eagle's left wing. This feature is likely in the working hub as it appears on most of the working dies for 1842 and is unusable as a working die diagnostic. (See photo at right)
- b) On almost all reverse dies for 1842, the vertical shield lines extend down outside the shield's edge into the eagle's feathers. Minor differences do appear between the dies but recording these lines, even on the same dies, lack a consistency required for die diagnostics. (See photo at right)
- c) On all 1842 dies, the vertical shield lines extend upwards into the shield's horizontal lines. Over the years, various researchers have tried to measure these lines and use them for



die identification. I have kept detailed information and studied them closely and I find these vertical lines vary with die state. My results indicate that this technique lacks consistency even on the same dies and therefore is not usable for die diagnostics. (See photo above.)

### 1842 date grid quick reference table

Obverse die date grid	Die Marriage
L4.5, .021"	WB-14
L4.5, .022"	WB-13
M2, .016"	WB-8
M2.5, .028"	WB-4
M2.5, .028"	WB-5
M2.5, .028"	WB-6
M3, .014"	WB-11
M3, .014"	WB-12
M3, .020"	WB-10
M3.5, .016"	WB-9
M4, .030"	WB-7
M4.5, .028"	WB-2
M4.5, .028"	WB-3
M4.5, .030"	WB-1

### **1842 Half Dollar Date Positions**



Obverse 1, WB-1, 2, 3, 7 Small Date, Repunched 4



Obverse 2, WB-4, 5, 6 Small Date



Obverse 3, WB-8 Medium Date



Obverse 4, WB-9 Medium Date



Obverse 5, WB-10 Medium Date



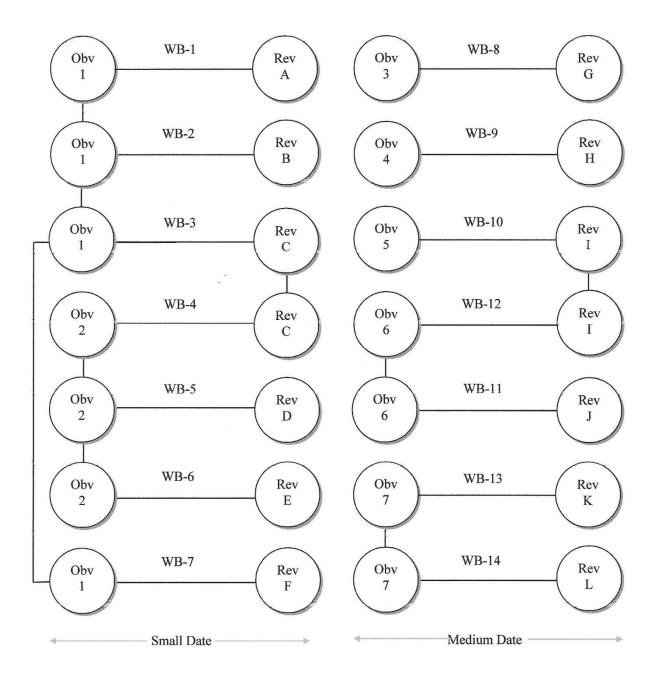
Obverse 6, WB-11, 12 Medium, Triple Punched Date



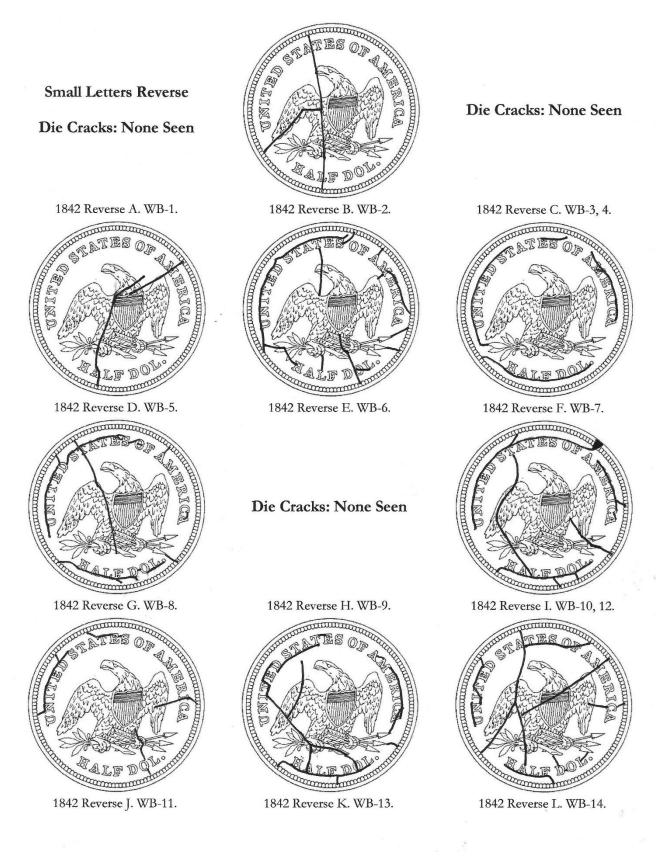
Obverse 7, WB-13, 14 Medium Repunched Date

1842 Obverse Reverse identifica keys	an die	9	Small Letters Reverse	Bisecting reverse die crack from K-11 to K-6	Doubled Die Reverse	Two major die cracks	Extensively cracked reverse die	E Cud over "TAT"	Extensive die cracks	Parallel die lines above the letters (A)MER(ICA)	Small lump on dentil above (AME)R(ICA)	Many reverse die cracks	Few usable die diagnostics:	Die lines above the letters (A)MER(ICA)
			A	В	С	D	E	F	G	H	I	J	K	L
Repunched 4	1	Small Date	WB-1	WB-2	WB-3			WB-7						
Date left	2	Smal			WB-4	WB-5	WB-6							
Die line thru the lower recessed area of the shield into the rock	3								WB-8					
Horizontal die lines in the rock support	4	Date								WB-9				
Vertical die line adjacent to Liberty's thumb	5	Medium Date									WB-10			
Triple Punched Date	6										WB-12	WB-11		
Repunched Date, 8 in Rock Support	7												WB-13	WB-14

# 1842 Half Dollar Die Linkage Diagram



## 1842 Half Dollar Reverse LDS Die Crack Diagrams



## 1842 WB-1, Small Date, Small Letters Reverse

# Obverse 1 Small Date



• Date right, slanting slightly up to right (photo). There is a small tine in left field off the tip of the serif of the 1(842). The (18)4(2) is slightly repunched north (photo below).



• Liberty's upper chest and breast area is weak on all examples seen.

# Reverse A Small Letters



• Small horizontal line from the eagle's mouth (photo)



- Vertical shield line D-1 extends into the eagle's feathers (photo)
- Weak details at eagle's lower left leg, the eagle's talons, and the arrow feathers

This is the first use of this obverse die and only use of this reverse die. See the notes on this die marriage in the introductory section of 1842.

Date grid: M4.5, .030"	148 reeds		Typical di	ameter = 1.221"	Rarity - 7
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: Po	AU Details		Coin from the Randy	Wiley Collection	
Cross reference: WB-Unlisted.					Version 82.S





▲ PCGS MS64 (PCGS #06594109), ex-Eugene Gardner Collection



▲ PCGS AU Details (PCGS #06610332), ex-Dick Osburn Collection



▲ PCGS VF20 (PCGS #6559927), Brian Greer variety discovery coin



▲ PCGS G6 (PCGS #24535767), Latest known

## 1842 WB-2, Small Date, Repunched 4

# Obverse 1 Small Date



• Date right, slanting slightly up to right (photo). There is a small tine in left field off the tip of the serif of the 1(842). The (18)4(2) is slightly repunched north (photo below).



• Liberty's upper chest and breast area is weak.

# Reverse B



- Bisecting reverse die crack from K-11 to K-6 with an offshoot to the left thru the left wing to rim at K-8 (photo). (See enhanced die crack diagram on next page.) Both examples of this die marriage observed to date have this bisecting die crack; this die likely broke early which immediately terminated its use and accounts for its rarity.
- Weak details at eagle's lower left leg, the eagle's talons, and the arrow feathers

This is the second use of this obverse die and only use of this reverse die.

I have only seen two examples of this die marriage. I rate it very conservatively an R-6 rarity because I think others will be found when collectors are knowledgeable and actively search for it.

Date grid: M4.5, .028"	eate grid: M4.5, .028" 148		Typical di	ameter = 1.218"	Rarity - 6
Drapery die state: Full	Foot support: Full		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: PO	AU55		Coin from the Bill Bu	gert Collection	
Cross reference: WB-101.					Version 82.S



#### 1842

### WB-3, Small Date, Repunched 4, Doubled Die Reverse

# Obverse 1 Small Date



• Date right, slanting slightly up to right (photo). There is a small tine in left field off the tip of the serif of the 1(842). The 18(4)2 is slightly repunched north (photo below).



- Note: the date position, repunching of the (18)4(0), and the tiny tine off the 1(842) are what distinguishes this obverse die from the other pairing (WB-4) with this reverse. The tiny tine is visible even on well-worn examples of this die marriage. This die marriage is rarer than WB-4.
- Liberty's upper chest and breast area is typically strong on this die marriage (in contrast to WB-2).

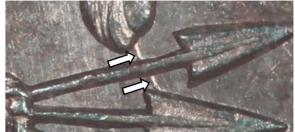
## Reverse C

Large Letters



Dramatically doubled reverse die. The most prominent doubling is seen on the legend and denomination letters, eagle's head, eagle's upper right wing, and the horizontal shield lines (photos above and below). Other doubling is seen on the legend and denomination.



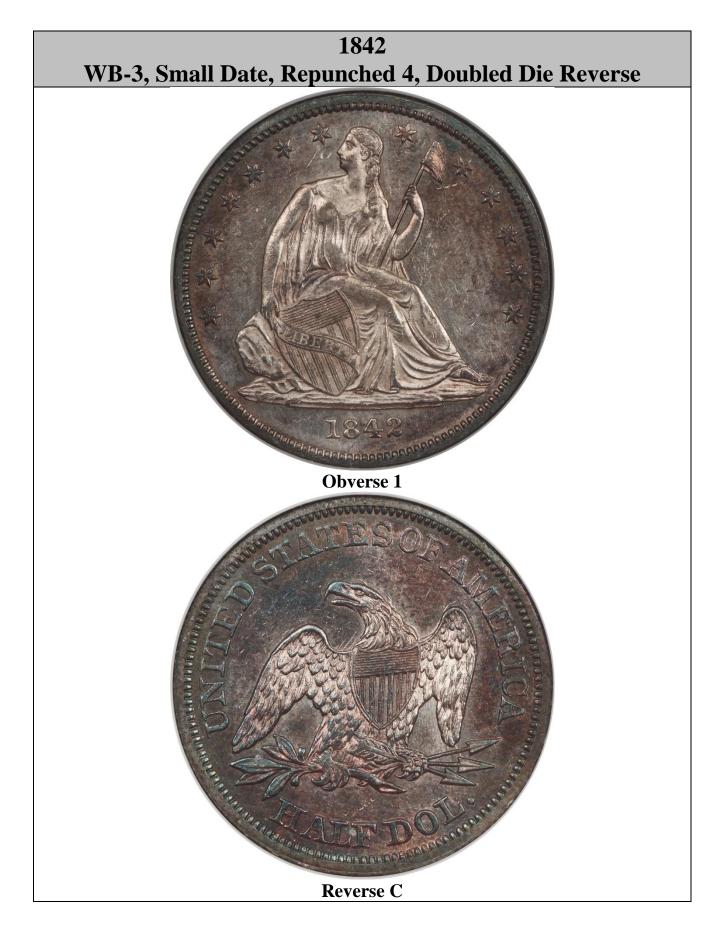


• Die line from the eagle's lower right wing tip to the middle arrowhead (photo)

This is the third use of this obverse die and first use of this reverse die.

The die doubling on the reverse of this die marriage is a naked eye doubled die and one of the most dramatic in the Liberty Seated half dollars series.

Date grid: M4.5, .028"	Date grid: M4.5, .028" 148		Typical diameter = 1.220"		Rarity - 6
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: N	AU58		Coin from the Dick O	sburn Collection	
Cross reference: WB-103.					Version 82.S



# 1842

## WB-4, Small Date, Doubled Die Reverse

# Obverse 2 Small Date



- Date left (photo). The date is positioned much more to the left when compared to the previous pairing with this reverse die (WB-3).
- Other than the date position, there are no usable die diagnostics seen on this obverse die.

### Reverse C

Large Letters



 Dramatically doubled reverse die. The most prominent doubling is seen on the legend and denomination letters, eagle's head, eagle's upper right wing, and the horizontal shield lines (photos above and below). Other doubling is seen on the legend and denomination.



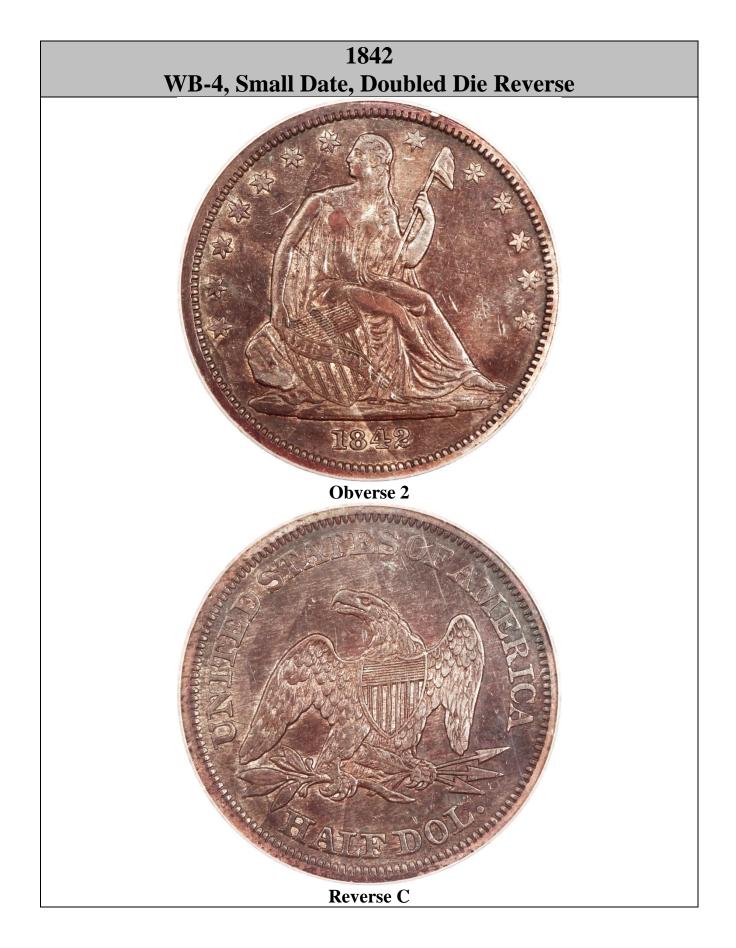


• Die line from the eagle's lower right wing tip to the middle arrowhead (photo)

This is the first use of this obverse die and second use of this reverse die.

The die doubling on the reverse of this die marriage is a naked eye doubled die and one of the most dramatic in the Liberty Seated half dollars series.

Date grid: M2.5, .028"	ite grid: M2.5, .028" 14		Typical di	ameter = 1.220"	Rarity - 5
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: SEGS XF45 "Mike Llo			yd"	Coin from the Bill Bu	gert Collection
Cross reference: WB-103.					Version 82.S



## 1842 WB-5, Small Date

# Obverse 2 Small Date



- Date left (photo).
- Other than the date position, there are no usable die diagnostics seen on this obverse die.

#### **Reverse D**

### Large Letters

• This reverse die has two major die cracks that nearly bisect the reverse and join near the upper shield lines: one crack from the edge at K-2 thru (A)M(ERICA) to across the eagle's upper right wing to the upper tip of the shield; the other from the edge at K-7 thru (H)A(LF) thru the eagle's talons, left leg, across the upper left horizontal shield lines across the eagle's neck barely into the field to the right of the eagle (See the enhanced die crack diagram on the next page). Although I have not seen one, this second die crack may extend from the back of the eagle's head thru the field into the legend on later die state coins.



• The lowest horizontal shield line extends into the eagle's left feathers and most of the vertical shield lines extend into the eagle's feathers. (photo)

This is the second use of this obverse die and only use of this reverse die.							
Date grid: M2.5, .028" 148 reeds			Typical di	ameter = 1.220"	Rarity - 3		
Drapery die state: Full Foot support: 1			'ull	Dentils: Obverse - Fu	ll; Reverse - Full		
Grade of coin depicted: AU55				Coin from the Randy	Wiley Collection		
Cross reference: WB-101.				Version 82.S			



# 1842 WB-6, Small Date

# Obverse 2 Small Date



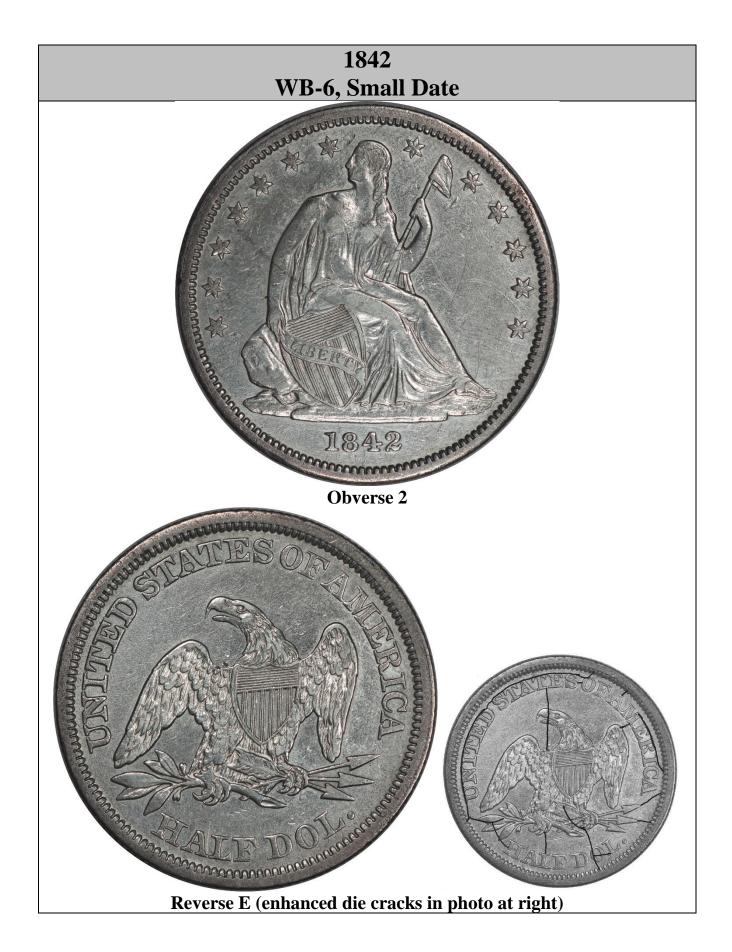
- Date left (photo)
- Other than the date position, there are no usable die diagnostics seen on this obverse die.

### **Reverse E**

Large Letters

- Extensively cracked reverse die with many cracks thru the legend, denomination, and a nearly complete bisecting die crack from K-6 thru the eagle's beak to K-12. Most die cracks are very weak. (See enhance die crack diagram on the next page.)
- Most of the vertical shield lines extend into the eagle's feathers

This is the third use of this obverse die and only use of this reverse die.							
Date grid: M2.5, .028"	145 reeds		Typical diameter = 1.211"		Rarity - 3		
Drapery die state: Full Foot support:		Foot support: F	ull	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: Po	CGS	XF40	Coin from the Bill Bugert Collection				
Cross reference: WB-101.	,			Version 82.S			



## 1842 WB-7, Small Date, Cud over "TAT"

# Obverse 1 Small Date



• Date right (photo). The small tine in left field off the tip of the serif of the 1(842) seen on previous uses of this die is not now visible. The (18)4(2) is slightly repunched north (photo below).



- Liberty's upper chest and breast area is typically weak on examples of this die marriage.
- Die crack thru stars 1-6 to head to star 7; another along the base of the digits in the date. (See enhanced die crack diagram on the next page.)

# Reverse F Large Letters



- Prominent rim cud above (S)TAT(ES) visible on all but the lowest grade examples of this die marriage (photo)
- Extensive die cracks around the legend and denomination. (See enhanced die crack diagram on the next page.)
- Weak details at eagle's lower left leg, the eagle's talons, and the arrow feathers
- At least example has been seen without the cud.

I 1817							
This is the fourth use of this obverse die and only use of this reverse die.							
This die marriage with cud reverse is by far the most common of the 1842 small date half dollars.							
Date grid: M4, .030"	I4, .030" 145 reeds Ty			Гуріcal diameter = 1.214" Rarit			
Drapery die state: Full Foot su		Foot support: F	ull	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: A	U53	3	Coin from the Bill Bugert Collection				
Cross reference: WB-102.					Version 82.S		



## 1842 WB-8, Medium Date

# Obverse 3 Medium Date



• Date left (photo)



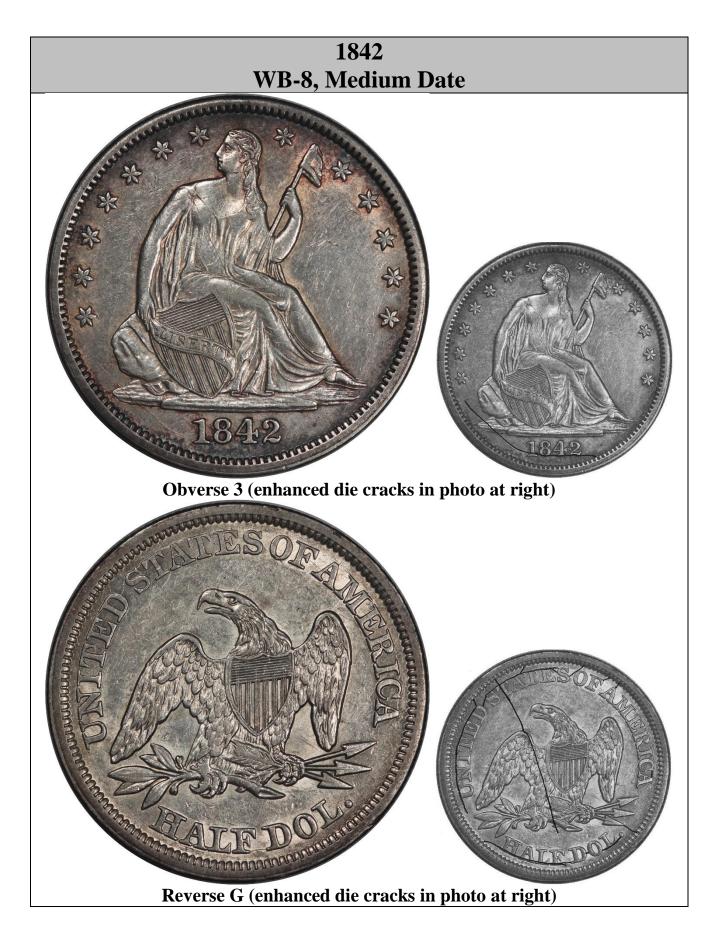
- Die line thru the lower recessed area of the shield into the rock (photo)
- Arcing die crack in the field from K-8 thru the rock support along the base of the date to the rim at K-5. (See enhanced die crack diagram on next page.)

### Reverse G

Large Letters

Extensive die cracks around the legend, denomination, and a very weak nearlybisecting die crack from K-11 thru the eagle's left wing and leg, into the field below the feather tip. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.							
Date grid: M2, .016"	145 reeds		Typical diameter = 1.218"		Rarity - 3		
Drapery die state: Full	Ill Foot support: V		Veak	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: AU53				Coin from the Bill Bu	gert Collection		
Cross reference: WB-104.					Version 82.S		



## 1842 WB-9, Medium Date

#### **Obverse 4**

Medium Date



• Date right (photo)



- Many horizontal die lines in the rock support between the shield point and the lower loop of Liberty's gown (photo)
- EDS: uncracked
- LDS: die cracks thru stars 9-12 and another along the rock and rock support. (See enhanced die crack diagram on the next page.)
- At least one example seen has a weakly struck Liberty's head.

# Reverse H

Large Letters



• EDS only: parallel die lines in the field between above the letters (A)MER(ICA) (photo)

This is the only use of this obverse die and only use of this reverse die.

Date grid: M3.5, .015"	145 reeds		Typical diameter = 1.215"		Rarity - 3
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: A	U55	j	Coin from the Bill Bu	gert Collection	
Cross reference: WB-104.					Version 82.S





Obverse 4 (enhanced die cracks in photo at right)



**Reverse H** 

# 1842 WB-10, Medium Date

## Obverse 5

Medium Date



• Date (photo)



• Vertical die line adjacent to Liberty's thumb (photo)



- Many die lines in Liberty's gown to the right of the shield's scroll (photo)
- LDS: many die cracks (See enhanced die crack diagram on the next page.)

# Reverse I Large Letters



- Small lump on dentil above (AME)R(ICA) (photo). This lump is very weak on LDS coins.
- See enhanced die crack diagram on the next page.

crack diagram on the next page.)							
This is the only use of this obverse die and first use of this reverse die.							
Date grid: M3, .020" 145 reeds			Typical diameter = 1.212"		Rarity - 3		
Drapery die state: Full Foot support:		Fu	ıll	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: AU50			Coin from the Bill Bugert Collection				
XF45			Date photo: Coin from the Randy Wiley Collection				
Cross reference: WB-104.						Version 82.S	



#### 1842

## WB-11, Medium Date, Triple Punched Date

#### Obverse 6

Medium Date



• Date slightly high when compared to the other date placements for 1842 (photo). The digits (1)842 are repunched north three times, one above the other (photo below).





- Many fine parallel die lines around the circumference from the dentils into the field, prominently below the date, at K-7, above Liberty's head, and at star 9 (photo)
- Clash in drapery below Liberty's elbow

#### **Reverse J**

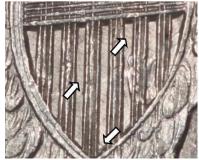
Large Letters

Many reverse die cracks are seen on all examples of this die marriage. The most prominent are at K-5 thru (D)O(L) (photo at right) and at K-3 thru (AMER)IC(A) (phot below.)



Others in the legend. (See enhanced die crack diagram on the next page.)

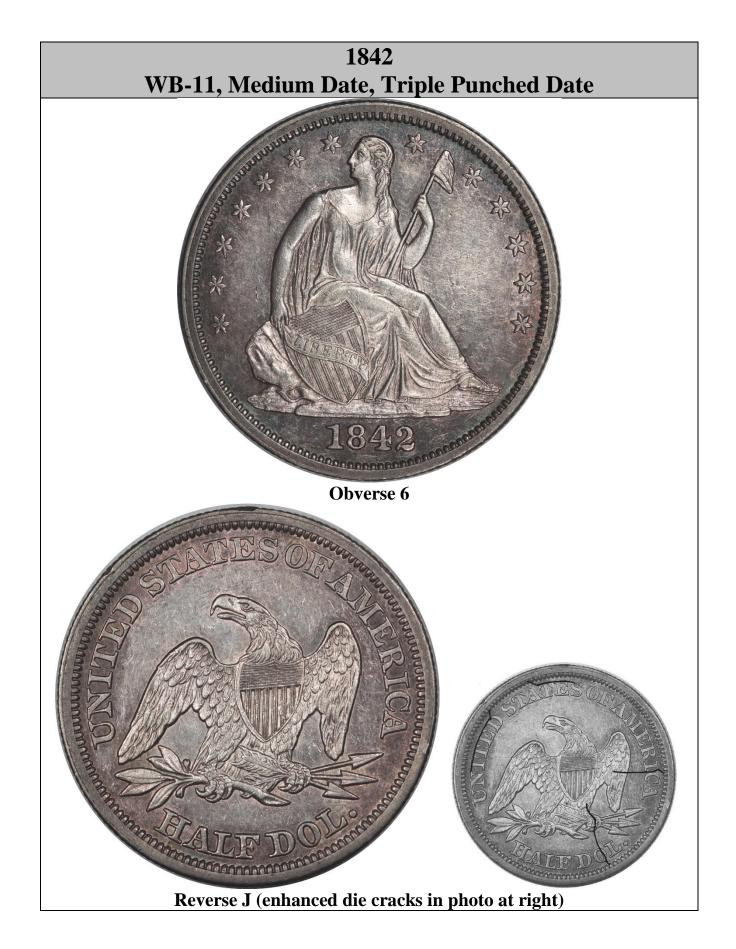




- Many diagonal (NW to SE) die lines in the recessed area of the shield, the most prominent line is inside the lower shield point (photo).
- Clash in shield's lower right

This is the first use of this obverse die and only use of this reverse die.

Date grid: M3, .014"	145 reeds		Typical diameter = 1.217"		Rarity - 3
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU55				Coin from the Randy Wiley Collection	
Cross reference: WB-105.					Version 82.S



#### 1842

### WB-12, Medium Date, Triple Punched Date

#### Obverse 6

Medium Date



• Date slightly high when compared to the other date placements for 1842 (photo). The digits (1)842 are repunched north three times, one above the other (photo below).





- Many fine parallel die lines around the circumference from the dentils into the field, prominently below the date, at K-7, above Liberty's head and at star 9 (photo)
- Clash in drapery below Liberty's elbow

#### Reverse I

Large Letters

All examples: extensive die cracks leading to a terminal die state with the die cracked in half from K-11 to K-6 (See enhanced die crack diagram on the next page.)



Small lump on dentil above (AME)R(ICA)
 (photo). This lump is very weak on all
 examples of this die marriage and non-visible
 on VLDS coins.



 VLDS only: diamond shaped rim cud above AM(ERICA) at K-1 (photo)

This is the second use of this obverse die and second use of this reverse die.

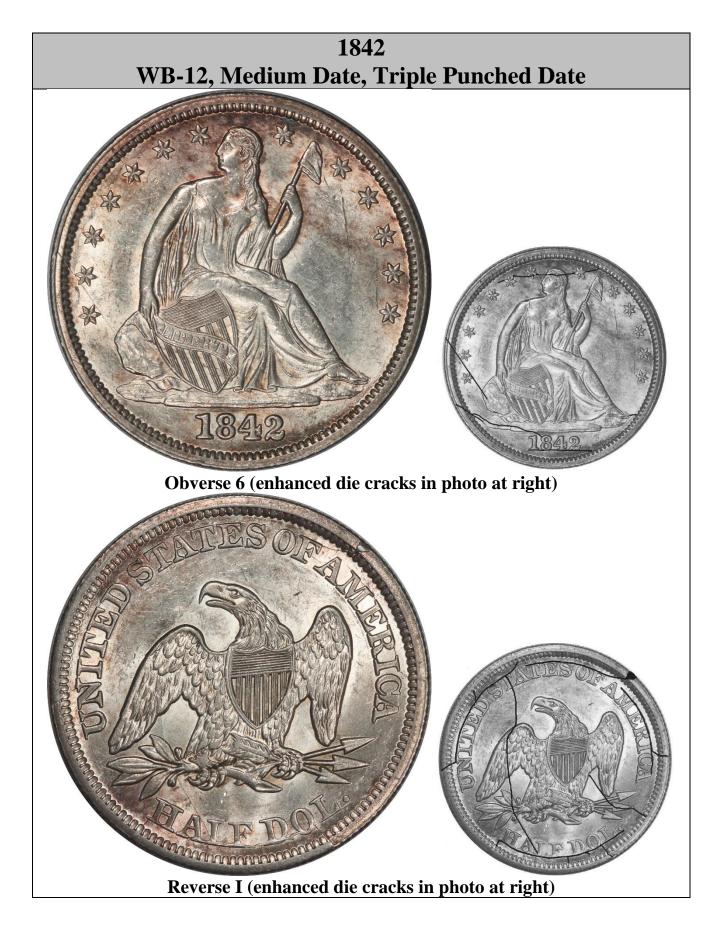
Date grid: M3, .014" | 145 reeds | Typical diameter = 1.214" | Rarity - 3

Drapery die state: Full Foot support: Full Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: PCGS AU55 Coin from the Bill Bugert Collection

MS61 VLDS coin from the Randy Wiley Collection

Cross reference: WB-105. Version 82.S



#### 1842

# WB-13, Medium Repunched Date, 8 in Rock Support

#### Obverse 7

Medium Date



• Date left when compared to the other date placements for 1842 (photo). The digits 18(42) are repunched west; the repunching on the 1 is only visible on EDS coins. There is also the top loop of another 8 in the rock support and hemline of Liberty's gown to the right of the shield point. (photo below)

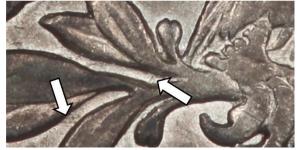




- Re-engraved foot support (photo)
- LDS: many die cracks (See enhanced die crack diagram on the next page.)

**Reverse K** 

Large Letters



- EDS: few usable die diagnostics other than the vertical die lines in the olive leaves and stems (photo)
- MDS-VLDS: extensive die cracks mostly on the lower third of the die (See enhanced die crack diagram on the next page.)

This is the first use of this obverse die and only use of this reverse die.

At least one EDS example seen with the reverse rotated 15° CCW.

Date grid: L4.5, .022"	145 reeds	Typical diameter = 1.202"		Rarity - 3	
Drapery die state: Full	Foot support: Re-	Foot support: Re-engraved		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45 and XF40 (VLDS)			Coins from the Bill B	ugert Collection	
Cross reference: WB-106.				Version 82.S	



#### 1842

# WB-14, Medium Repunched Date, 8 in Rock Support

#### **Obverse 7**

Medium Date



• Date left when compared to the other date placements for 1842 (photo). The digit (1)8(42) is repunched west; the repunching on the 1 seen on the previous use of this die (WB-13) is not visible on this die marriage. There is also the top loop of another 8 in the rock support and hemline of Liberty's gown to the right of the shield point (photo below).



- Re-engraved foot support
- All die states: die cracks (See enhanced die crack diagram on the next page.)

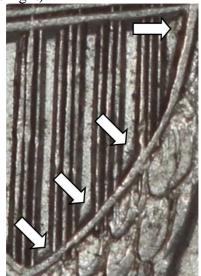
#### **Reverse** L

Large Letters





All die states: die lines above the letters (A)MER(ICA) (photo) and UNITE(D). These die lines become weaker with die state but are still weakly visible in the dentils on LDS coins (photos: EDS above left, LDS above right).



- All die states: unfinished die in the recessed area along the inner right edge of the shield
- EDS: uncracked
- MDS-LDS: extensive die cracks (See enhanced die crack diagram on the next page.)

Inis is the second use of the	ns obverse die and or	my use of this reverse die.

Date grid: L4.5, .022"	145 reeds	eeds Typical diameter = 1.201"		Rarity - 3
Drapery die state: Full	Foot support: Re-engraved		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: EDS - AU58			EDS coin from the Randy Wiley Collection	
LDS - PCGS AU50			oin from the Bill Buger	rt Collection
Cross reference: WB-106.				Version 82.S



Reverse L (enhanced die cracks in photo at right)

#### 1843

1843 is one of the most common dates in the Liberty Seated half dollar series and has the most die marriages of the pre-1853 Philadelphia Mint Liberty Seated half dollars. These are relatively inexpensive and available in all grades; they are plentiful at any coin show or in dealer stocks on the internet. If you are a collector who likes die cracked coins, this date is for you. Twenty-eight of 29 reverse dies are dramatically cracked with interesting networks of seemingly spider-web-like die cracks. Along with the cracked dies, this date has a multiple of repunched date variations as well as a doubled die. This works to your advantage. With a wide variety of 1843s that are cheap and plentiful, collecting them all will be a challenge that may keep you interested for years.

Thirty-seven die marriages are known as depicted in the tables below.

Mintage	Number of	Obverse	Reverse	Reed Counts
	Die Marriages	Dies	Dies	Known
3,844,000	37	18	29	2 (144, 145)

Extensively Cracked 1843 Reverse Dies. Even with a causal glance at the 1843 half dollar reverse die crack diagrams on the following pages, it is quickly evident that there are excessive die failures for this date. The cracking was likely caused by a combination of inferior quality die steel, poor annealing then hardening of the dies, and heavy stress on the anvil (i.e., lower) reverse die. The years 1842 thru 1844 are noted for these excessively cracked dies (hence my choice to include the reverse die crack diagrams) and the die clashing which likely contributed to the shortened die life.

Whether the introduction of the large letters reverse in 1842 (as a change from the small letters reverse) had anything to do with the die failures is not known. My suspicions are that the deep sharp edges of the new large letters in the denomination and legend caused the dies to crack quicker and it took the Mint employees a few years to work out the problems of the manufacturing and use of the working dies. In 1845 and henceforth, the reverse dies are not as heavily cracked.

**Flat top 3.** In 1843, the Philadelphia Mint adopted a flat top style 3 in the date. The flat top 3 was previously used on half dollars in 1813 but not in 1823 nor in 1833. Perhaps it was introduced in 1843 out of nostalgia but evidentially the style was not popular because it was not continued and differs from any style subsequently used in 1853, 1863, 1873, and 1883 (which have rounded top 3s). In the Liberty Seated half dollar series, 1843 is the only year with the flat top 3.



## 1843 date grid quick reference table

From the listing below of the 1843 obverse date grids, it is readily apparent that there is very little variation in the date placement for these half dollars. Date placement will therefore have limited value in attributing the 1843 die marriages unless you have an adequate measurement device (see Introductory text). Alternately, a close approximation is to study the lower left serif of the 1's position to the dentil below and compare your coin to the date images for each die marriage.

Obverse die date grid	Die Marriage
M1, .020''	WB-23
M1, .020"	WB-24
M1, .020"	WB-25
M1.5, .020"	WB-13
M2, .018"	WB-35
M2, .018"	WB-36
M2, .018"	WB-37
M2, .020"	WB-21
M2, .022"	WB-11
M2.2, .020"	WB-8
M2.2, .020"	WB-9
M2.2, .022"	WB-10
M2.5, .022"	WB-1
M2.5, .023"	WB-2
M3, .014"	WB-30
M3, .015"	WB-31
M3, .016"	WB-22
M3, .016"	WB-29
M3, .016"	WB-32
M3, .020"	WB-5
M3, .020"	WB-6
M3, .020"	WB-7
M3, .022"	WB-14
M3, .024"	WB-20
M3, .025"	WB-4
M3, .026"	WB-3
M3.5, .020"	WB-27
M3.5, .020"	WB-33
M3.5, .020"	WB-34
M3.5, .021"	WB-28
M3.5, .022"	WB-15
M4, .015"	WB-17
M4, .018"	WB-18
M4, .022"	WB-26
M4, .028"	WB-12
M4, .028"	WB-16
M4, .024"	WB-19

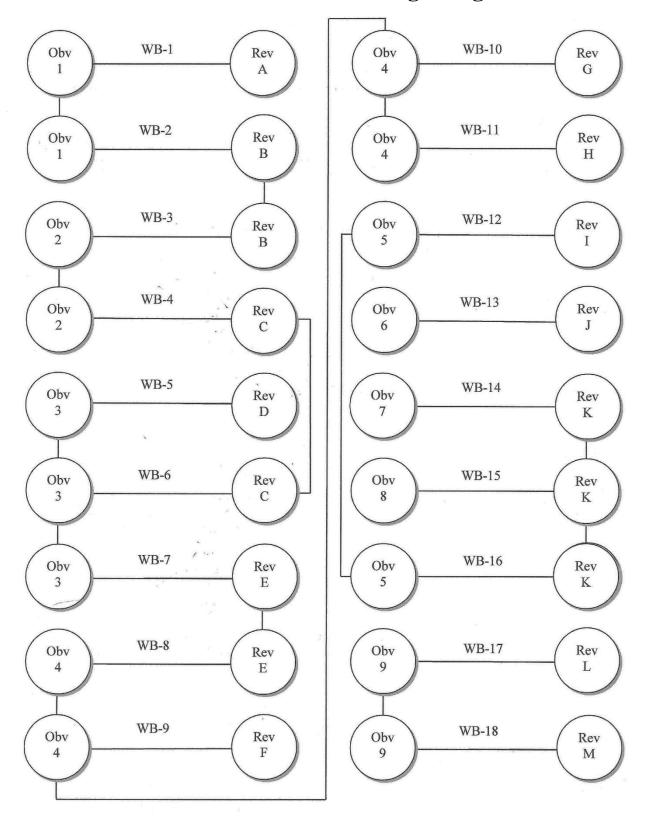
#### **1843 Half Dollar Date Positions**



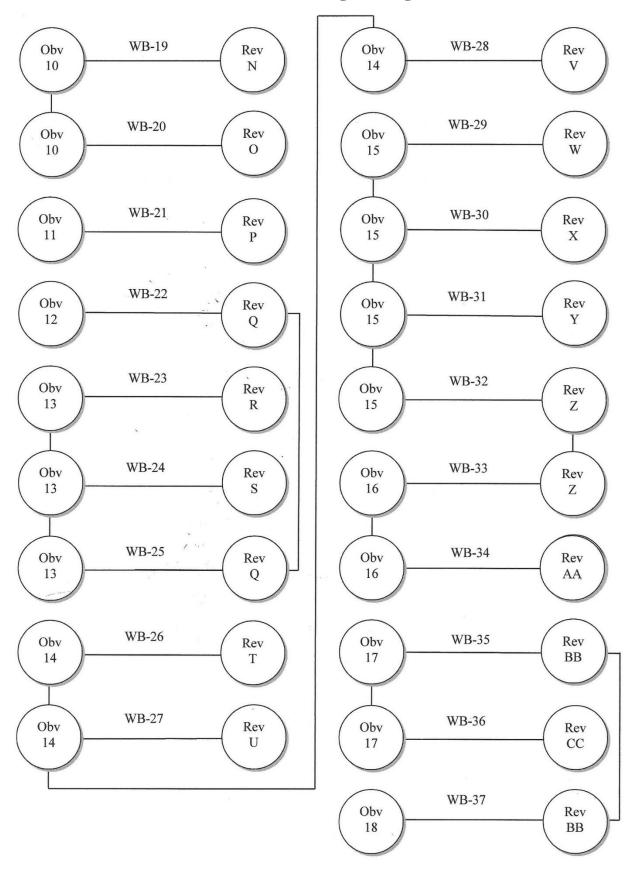
In almost all cases, 1843 half dollars are relatively easy to attribute by studying the reverse die crack patterns. Most die crack patterns are different but a few are very similar such that careful examination of the die cracks is necessary to properly attribute these dies and the correct die marriage.

1843 Obverse and Reverse die identification keys		See Reverse Die Crack Diagrams A thru BB	
Re-engraved foot support	1	WB-1, 2	
Die line under Liberty's chin	2	WB-3, 4	
Date slants down to the right	3	WB-5, 6, 7	
Triple 43	4	WB-8, 9, 10, 11	
43 Repunched South	5	WB-12	
Extensive die cracks	6	WB-13	
Extensive die cracks	7	WB-14	
Many small die lines from Liberty's elbow and the drapery	8	WB-15	
Repunched Date	9	WB-17, 18	
Repunched 4	10	WB-19, 20	
Repunched 8	11	WB-21	
Date slants down to right; LDS – cud at date	12	WB-22	
Doubled Die Obverse	13	WB-13, 14, 25	
Repunched 4	14	WB-26, 27, 28	
Center Dot	15	WB-29, 30, 31, 32	
Repunched 4	16	WB-33, 34	
Triple Punched 43	17	WB-35, 36	
Repunched 3	18	WB-37	

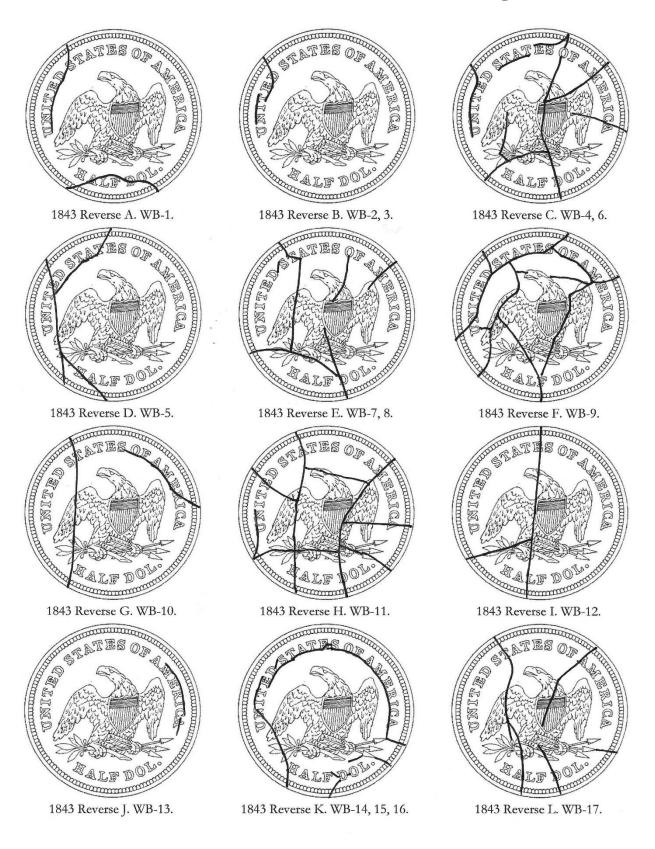
# 1843 Half Dollar Die Linkage Diagram



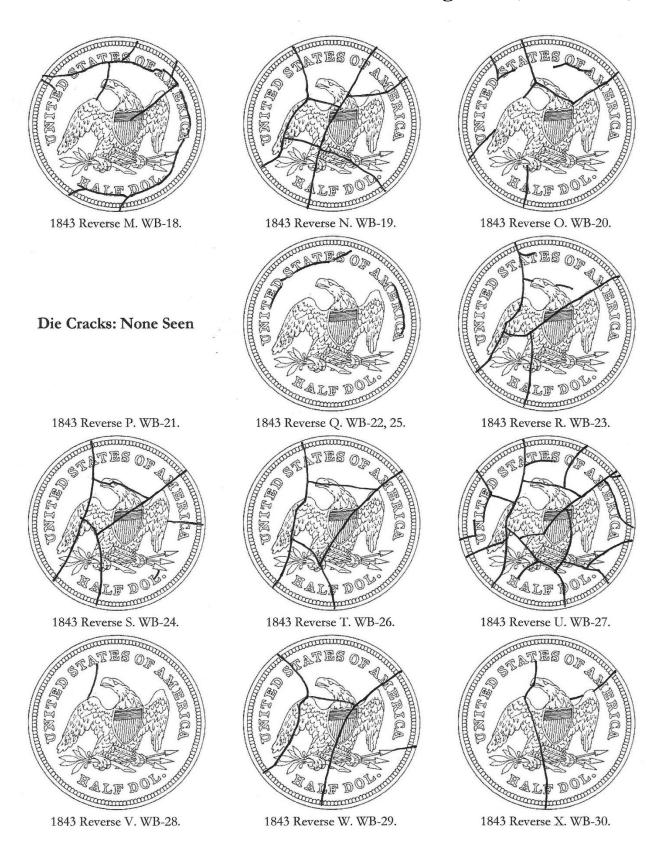
# 1843 Half Dollar Die Linkage Diagram (Continued)



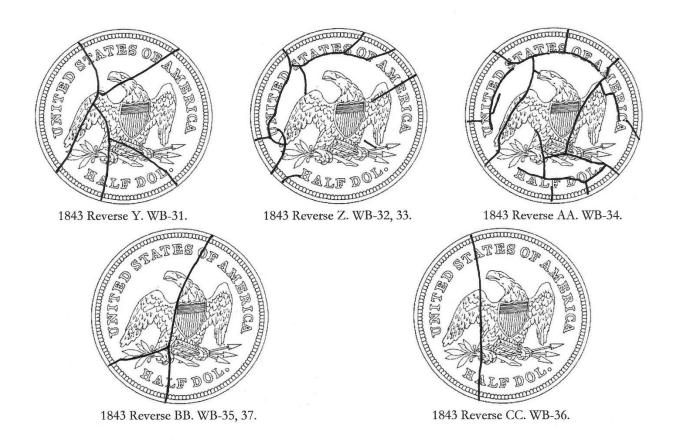
# 1843 Half Dollar Reverse Die Crack Diagrams



# 1843 Half Dollar Reverse Die Crack Diagrams (Continued)



# 1843 Half Dollar Reverse Die Crack Diagrams (Continued)



### 1843 WB-1

Obverse 1



• Date (photo). VEDS only: (1)843 repunched slightly north (photo below).





- MDS-LDS: a die line extends from the rock support at each end into the dentils (right end with foot support in photo).
- Re-engraved foot support
- Most die states: die crack along the base of the digits in the date and an arcing die crack left of the date into the rock support (See enhanced die crack diagram on next page.)







All die states: many interesting crisscrossing die lines in the eagle's upper left wing into the shield and left field (VEDS photo far above) and in the eagle's feathers below the shield point (photo above). These later die lines are heavy on coins of all die states.



- All die states: arcing die crack thru (H)ALF DO(L) (photo). This die crack is weak on VEDS coins (but still there) to very heavy on LDS coins (LDS photo above). (See enhanced die crack diagram on next page.)
- Clash in shield's lower right

This is the first use of this obverse die and only use of this reverse die.

Readily identifiable by the arcing reverse die crack thru the denomination, this is one of the most common 1843 half dollar die marriages.

Date grid: M2.5, .022"	145 reeds Typical dia		ameter = 1.198"	Rarity - 2		
Drapery die state: Full	pery die state: Full Foot support: Full to w			ll; Reverse - Full		
Grade of coins depicted: AU55			VEDS coin from the Dick Osburn Collection			
AU50			LDS coin from the Randy Wiley Collection			
Cross reference: WB-101.				Version 82.S		



# 1843 WB-2

Obverse 1



• Date (photo)



- All die states: a die line extends from the rock support at each end into the dentils (right end with foot support in photo)
- Re-engraved foot support
- Unfinished under the olive leaves
- All die states: die crack along the base of the digits in the date and an arcing die crack left of the date into the rock support (See enhanced die crack diagram on next page.)

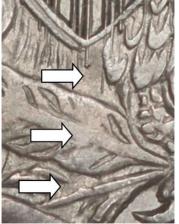
Reverse B



• Small lump on A(MERICA) (photo)



• Small lump in upper left wing (photo)

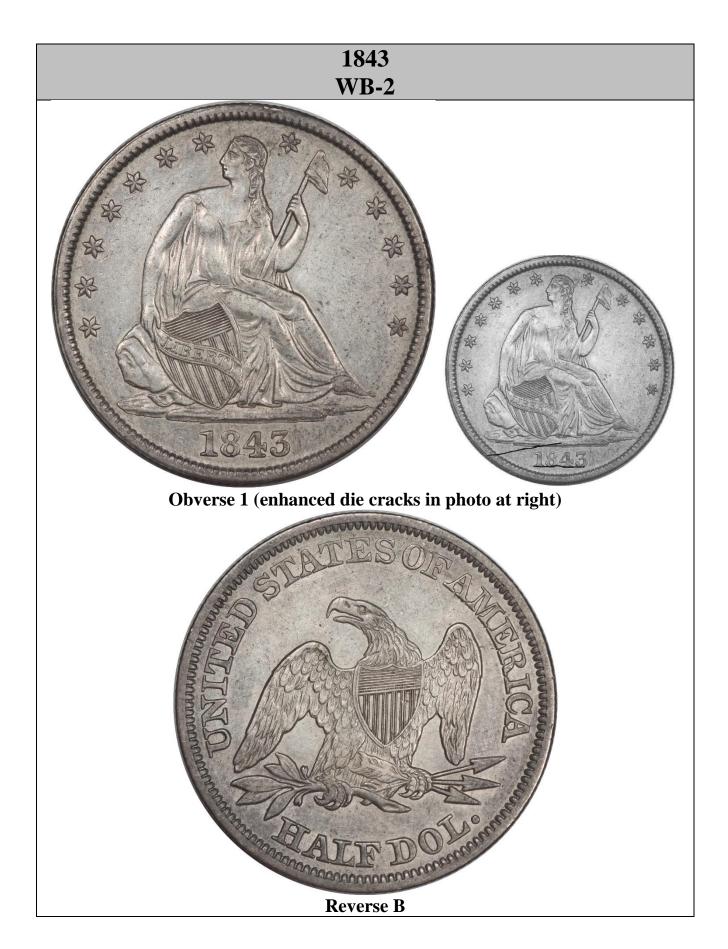


- Die bulge in the eagle's feathers and arrow feathers below the shield (photo). This die bulge appears as a raised area nearly level with the shield edge and feathers.
- Clash in shield's upper right

This is the second use of this obverse die and first use of this reverse die.

The collar appears to have a fine crack with a raised edge around the circumference on this die marriage.

Date grid: M2.5, .023"	145 reeds		Typical diameter = 1.193"		Rarity - 3
Drapery die state: Full	Foot support: We		Veak	Dentils: Obverse - Weak; Reverse - Full	
Grade of coin depicted: AU53				Coin from the Bill Bug	gert Collection
Cross reference: WB-101.					Version 82.S



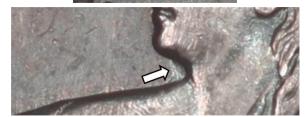
# 1843 WB-3

Obverse 2



• Date centered (photo). The lower edge of the serif of the 1(843) shows slight repunching on all die states of high grade coins (photo below).





- Die line under Liberty's chin (photo)
- All examples seen: arcing die crack from the top of the (184)3 into the rock support, rock, and into the field to star 3 (See enhanced die crack diagram on next page.)
- Re-engraved foot support

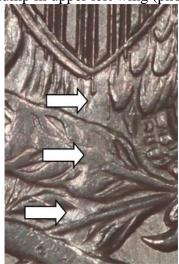




• Small lump on A(MERICA) (photo)



Small lump in upper left wing (photo)



- Die bulge in the eagle's feathers and arrow feathers below the shield (photo). This die bulge appears as a raised area nearly level with the shield edge and feathers.
- Clash in shield's upper right

This is the first use of this obverse die and second use of this reverse die.

Date grid: M3, .026"	145 reeds		Typical diameter = 1.199"		Rarity - 3
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Fu	ll; Reverse - Full
Grade of coins depicted: EDS - AU55			EDS	EDS coin from the Randy Wiley Collection	
LDS - XF40			LDS	LDS coin from the Bill Bugert Collection	
Cross reference: WB-101					Version 82.S



# 1843 WB-4

**Obverse 2** 



• Date centered (photo). The slight repunching on the lower edge of the serif of the 1(843) seen on the previous use of this die (WB-3) is not now visible.



- Die line under Liberty's chin (photo)
- All die states: arcing die crack from the top of the (184)3 into the rock support, rock, and into the field to star 3 (See enhanced die crack diagram on next page.)
- Re-engraved foot support

Reverse C



- Die line from the top of the letter A(MERICA) to the dentil (photo). Other very faint die lines above (STAT)E(S).
- All examples seen: extensive die cracks on this die (See enhanced die crack diagram on next page.)

This is the second use of this obverse die and the first use of this reverse die.					
Date grid: M3, .025"	14	5 reeds	Typical di	ameter = 1.199"	Rarity - 3
Drapery die state: Full	e state: Full Foot support: Full		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: XF45			Coin from the Randy	Wiley Collection	
Cross reference: WB-101.					Version 82.S



# 1843 **WB-5**

Obverse 3



Date slants down to the right (photo). On EDS-MDS coins, all digits in the date are repunched south (photo below).



- Re-engraved foot support
- Rusty die: small rust lumps throughout Liberty
- MDS-LDS: arcing die crack thru date and rock support to rim at K-4. (See enhanced die crack diagram on next page.)





All die states: vertical and horizontal die lines in the shield's upper left into the eagle's left wing (photo above). Other vertical die lines in the field at the eagle's left leg and left wing (photo below).





VLDS: split level in left field (photo). EDS is uncracked (photo above left).

Rarity - 3

MDS-LDS: rim cud at K-4 to K-6

This is the first use of this obverse die and only use of this revers die.

Date grid: M3, .020"	14	4 reeds	eeds Typical diameter = 1.201"		VLDS: Rarity - 6
Drapery die state: Full	Foot support: Fu		ull	Dentils: Obverse - Weak; Reverse - Full	
Grade of coins depicted: EDS - PCGS MS62				oin from the Dick Osburr	
VLDS - VF25			VLDS	VLDS coin from the Scott Mickelson Collection	
Cross reference: WB-101					Version 82 S



# 1843 WB-6

Obverse 3

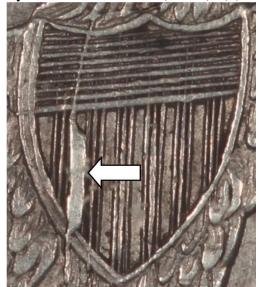


- Date slants down to the right (photo). The repunching on the date seen in the previous use of this die (WB-5) is not visible on this die marriage.
- Re-engraved foot support
- Rusty die: small rust lumps throughout Liberty
- All die states: arcing die crack thru date and rock support to rim at K-4. (See enhanced die crack diagram on next page.)
- The die is crumbling along the rim from K-3 to K-7. See photo above.





• Die line from the top of the letter A(MERICA) to the dentil (photo). Other very faint die lines above (STAT)E(S).

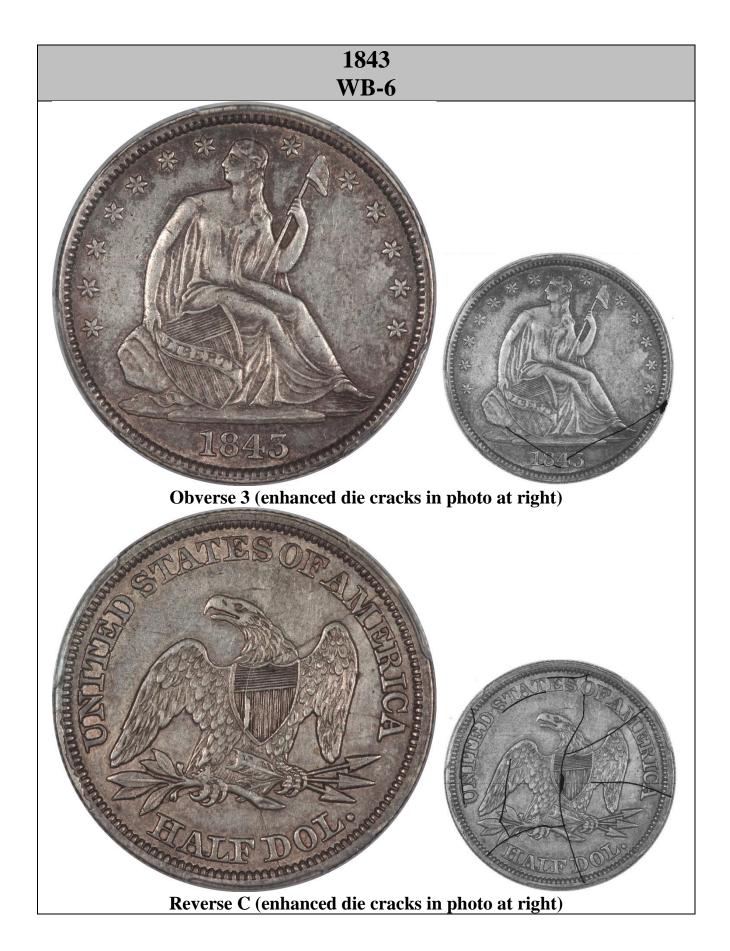


- Internal cud between vertical shield lines A-3 to B-1 (photo)
- All examples seen: extensive die cracks on this die (See enhanced die crack diagram on next page.)

This is the second use of this obverse die and second use of this reverse die.

This die marriage has one of the few known internal cuds in the Liberty Seated half dollar series.

$\mathcal{C}$			<u> </u>		
Date grid: M3, .020"	14	144 reeds Typical di		diameter = 1.203"	Rarity - 5
Drapery die state: Full Foot support: Full		Dentils: Obverse - Weak; Reverse - Full			
Grade of coin depicted: PCGS XF40			Coin from the Dick C	sburn Collection	
Cross reference: WB-101.				Version 82.S	



### 1843 WB-7 (Beistle-2B)

This die marriage is currently unknown. Based on M.L. Beistle's description of his variety "2 B" (scan of the text of that die marriage is imaged at right) in his 1929 reference, A Register of Half Dollar Die Varieties and Sub-Varieties, these descriptions exactly match a late die state of obverse 3 and an early die state of reverse E.

1843 2 B. This date is slightly lower than on No. 1, and a die crack joins 1 and 8. Another runs from the edge, near the end of the base of Liberty; through the base and across the center of the upper circle of 8, to the left end of the cross bar of 4, across the upper cross bar of 3, across the base of Liberty and the foot, at the junction of the toes and foot, to the edge, midway between the end of toe and last star.

Rev. B. The two left lines in the right vertical stripe, extend up into the fifth cross bar, and the right line extends up into the seventh cross bar. The center line, of the second vertical stripe from the right, is long and enters the sixth cross bar, and the two lines on the right, and left, cross only two bars. A die crack runs through the end of the olive stem, across the two left serifs of D in DOL., to the edge.

Beistle evidently saw this die

marriage and reported it in his reference so we think it must exist. Randy Wiley, Dick Osburn, and I have been actively searching for an example of this die marriage for years without success. Perhaps a knowledgeable collector will find one.

#### Obverse 3

Image below is of Obverse 3 on WB-6.



 Arching die crack thru date and rock support to rim at K-4 matching Beistle's description above. (See enhanced die crack diagram on next page.)

#### **Reverse E**

Image below is of Reverse E on WB-8.



- Die crack from the end of the olive stem across the two left serifs of the D(OL), matching Beistle's description above.
- This die crack, paired with the cracked obverse as described at left, is the key to finding this die marriage.

This is the third use of this obverse die and first use of this reverse die.

An example of this die marriage is currently unknown and the rarity is unknown.

Date grid: M3, .020"	Unknown reeds	Typical diameter = Unknown"		Rarity – 7?
Cross reference: WB-101				Version 82.S





Obverse 3 enhanced die cracks



Reverse E major die crack

# 1843 WB-8, Tripled 43

#### Obverse 4



• Date repunched north and south three times, one above the other (photo). The most prominent repunching is on the crossbar of the (18)4(3) as shown (photo below).



Heavy clash in the drapery below Liberty's elbow



• Re-engraved foot support (photo)

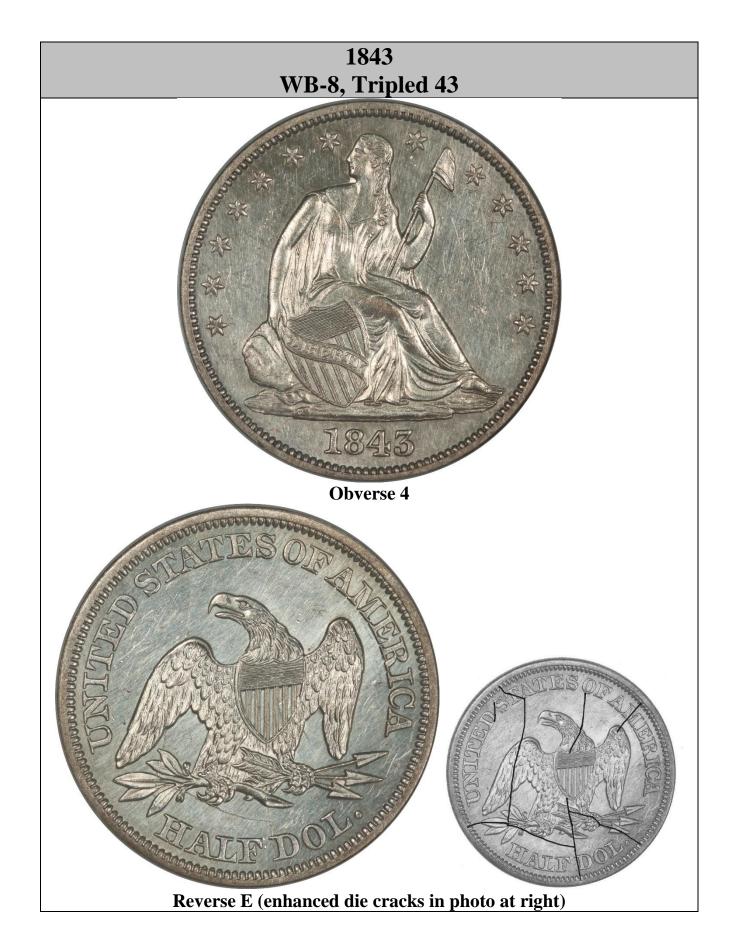
### Reverse E

- Only example seen: extensive die cracks on this die. (See enhanced die crack diagram on next page.)
- Clash in shield's lower right

This is the first use of this obverse die and second use of this reverse die.

In years of active searching by Randy Wiley, Dick Osburn, and I for 1843 half dollar die marriages, only Dick has found an example of this die marriage. The rarity is a very conservative estimate.

Date grid: M2.2, .020"	Unknown reeds		Typical diameter = Unknown"		Rarity - 6
Drapery die state: Full	rapery die state: Full Foot support:		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: NGC MS61				Coin from the Dick Osburn Collection	
Cross reference: WB-105.				Version 82.S	



# 1843 WB-9, Tripled 43

#### **Obverse 4**



• Date repunched north and south three times, one above the other; note the rim cud below the date (photo). The most prominent repunching is on the crossbar of the (18)4(3) as shown (photo below). The repunching is weaker than seen on the previous use (WB-8) of this die.



- Heavy clash in the drapery below Liberty's elbow
- Re-engraved foot support
- Clash in drapery below Liberty's elbow

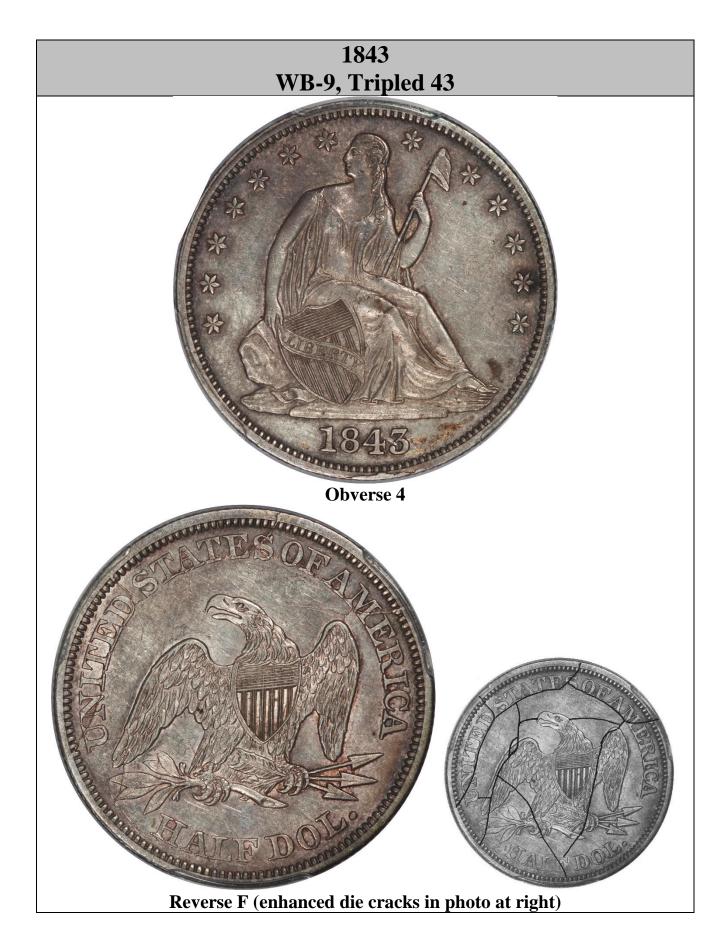
#### **Reverse F**

- EDS: uncracked
- MDS-LDS: extensively cracked reverse die. (See enhanced die crack diagram on the next page.)



- Heavily re-engraved vertical shield lines into the horizontal shield lines (photo)
- Clash in shield's lower right

Clash in drapery below Electry's cloow						
This is the second use of this obverse die and only use of this reverse die.						
Date grid: M2.2, .020"	144 reeds		Typical diameter = 1.202"		Rarity - 4	
Drapery die state: Full Foot support: I		ull	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: NGC MS61				Coin from the Dick Osburn Collection		
Cross reference: WB-105.					Version 82.S	



# 1843 WB-10, Tripled 43

**Obverse 4** 

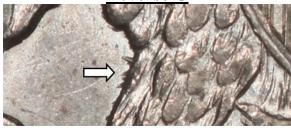


• Date repunched north three times, one above the other; note the rim cud below the date (photo) and another at K-11. The most prominent repunching is on the crossbar of the (18)4(3) as shown (photo below). The repunching is weaker than seen on the previous uses (WB-8 and 9) of this die.

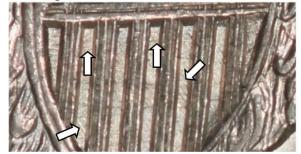


- Re-engraved foot support
- Clash in drapery below Liberty's elbow
- LDS: die crack from 4 into rock support and foot (See enhanced die crack diagram on next page.)

Reverse G



 Small tines from the eagle's left leg into the field (photo)



 Weak horizontal and diagonal die lines in the shield's lower recessed areas between the vertical stripes (photo)



- Spade shaped die defect off the right side of the S(TATES) (photo)(photo)
- Rim cud at K-10:30
- All examples seen: bisecting die crack from K-11 to K-7 (See enhanced die crack diagram on the next page.)

This is the third use of this obverse die and only use of this reverse die.						
Date grid: M2.2, .020"	144 reeds		Typical diameter = 1.203"		Rarity - 3	
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58				Coin from the Randy Wiley Collection		
Cross reference: WB-105.					Version 82.S	



# 1843 WB-11, Tripled 43

Obverse 4

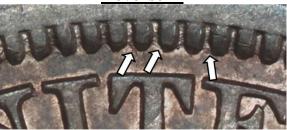


• Date repunched north and south three times, one above the other; note the rim cud below the date (photo) and another at K-11. The most prominent repunching is on the crossbar of the (18)4(3) as shown (photo below). The repunching is weaker than seen on the previous uses (WB-8, 9, and 10) of this die.



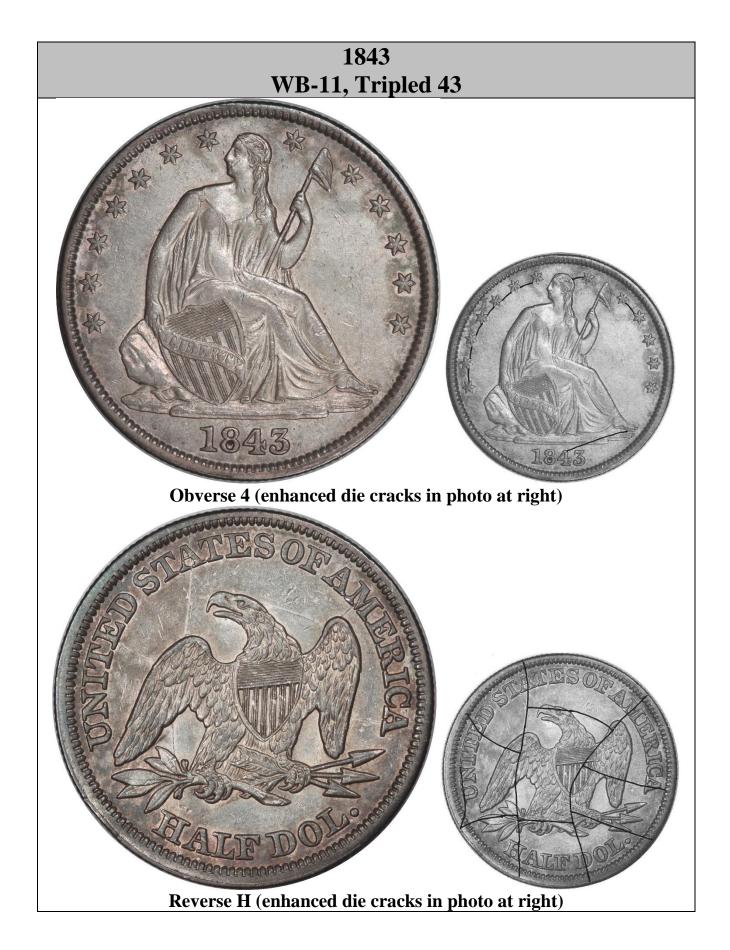
- Re-engraved foot support
- Clash in drapery below Liberty's elbow
- All die states: die crack from 4 into rock support and foot and between stars 1-7 and head to star 8, stars 9-10 (See enhanced die crack diagram on next page.)

Reverse H



- Faint die lines between and from the dentils above (UNI)TE(D) (photo)
- All examples seen: extensively cracked die (See enhanced die crack diagram on the next page.)

This is the fourth use of this obverse die and only use of this reverse die.							
Date grid: M2, .022"	144 reeds		Typical diameter = 1.200"		Rarity - 3		
Drapery die state: Full Foot support: F		ull	Dentils: Obverse - Fu	ll; Reverse - Full			
Grade of coin depicted: AU55				Coin from the Bill Bu	gert Collection		
Cross reference: WB-105.					Version 82.S		



# 1843 WB-12, 43 Repunched South

Obverse 5

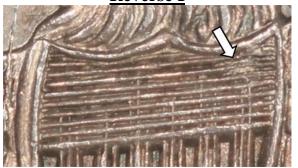


• Date (photo above) with digits 43 repunched south. The repunching shows on the right serif of the 4 and ball of the 3 (photo below).



- EDS: no cracks
- MDS-LDS: extensively cracked die with a die crack arching thru the top of the (1)8(43) (See enhanced die crack diagram on the next page.)
- Re-engraved foot support
- Clash in drapery below Liberty's elbow





- Raised rust patch in upper right hand corner of the horizontal shield lines (photo)
- Heavily re-engraved vertical shield lines into the horizontal shield lines (photo above.)
- All examples seen: bisecting reverse die crack from K-12 to K-6 (See enhanced die crack diagram on the next page.)

The state of the s						
This is the first use of this obverse die (? - see WB-16) and only use of this reverse die.						
Date grid: M4, .028" 145 reeds T			Тур	oical di	ameter = 1.206"	Rarity - 3
Drapery die state: Full Foot support: Full			ull		Dentils: Obverse - Fu	ll; Reverse - Full
Grade of coins depicted: M	1DS	S: MS62		MDS o	coin from the Randy W	iley Collection
LDS: XF40				LDS coin from the Bill Bugert Collection		
Cross reference: WB-Unlisted.					Version 82.S	



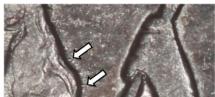
## 1843 WB-13

Obverse 6



• Date left (photo) with very minor repunching visible on the 18(43) only on EDS coins. Date doubling shows above the lower right serif of the 1 and in the upper loop of the 8 (photo below).





- EDS only: horizontal lines from Liberty's right shoulder into the field (photo)
- All examples seen: extensive die cracks (See enhanced die crack diagram on the next page.)
- Re-engraved foot support
- Clash in drapery below Liberty's elbow

**Reverse J** 



 EDS only: two diagonal die lines in the (A)M(ERICA) (photo). Other very faint die lines above OF.



- The vertical shield lines extend multiple times into the eagle's feathers (photo).
- Multiple clashes in the shield's lower right
- Minor reverse die cracks (See enhanced die crack diagram on next page.)

Clash in drapery below Liberty's elbow						
This is the only use of this obverse die and only use of this reverse die.						
Date grid: M1.5, .020" 145 reeds Typical diameter = 1.200" Rate					Rarity - 3	
Drapery die state: Full Foot support: Full			ull		Dentils: Obverse - Fu	ll; Reverse - Full
Grade of coins depicted: E	EDS	- VF25		EDS c	oin from the Randy Wi	ley Collection
LDS - XF40				LDS c	oin from the Bill Buger	rt Collection
Cross reference: WB-101.				·		Version 82.S



# 1843 WB-14

Obverse 7



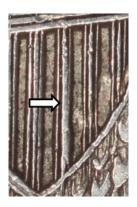
• Date (photo) with rim cuds below the date. The 4 has very minor repunching with doubling below the serif (photo below).



- EDS: die cracks first appear above Liberty's head
- MDS-LDS: extensive die cracks (See enhanced die crack diagram on the next page.)

### Reverse K

All examples seen: vertical shield lines D-2 and D-3 are joined or D-2 is very thick (photo). On very high grade coins, D-2 is not joined but very thick.



- EDS: uncracked
- MDS-LDS: circumferential die cracks (See enhanced die crack diagram on next page.)
- Clash in shield's lower right

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
This is the only use of this obverse die and first use of this reverse die.							
Date grid: M3, .022" 145 reeds Typical diameter = 1.200" Rarity - 3							
Drapery die state: Full Foot support: Full				Dentils: Obverse - Fu	ll; Reverse - Full		
Grade of coin depicted: XF45				Coin from the Bill Bu	gert Collection		
Cross reference: WB-101	Cross reference: WR-101				Version 82.S		

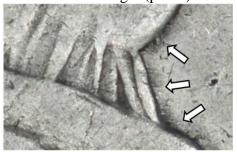


## 1843 WB-15

#### Obverse 8



• Date slants down to right (photo)



• Many small die lines from Liberty's elbow and the drapery (photo of VG coin)



- Several vertical die lines in the field from the rock near Liberty's left hand (photo). These lines are also seen on low grade examples of this die marriage.
- All examples seen: extensively cracked die (See enhanced die crack diagram on the next page.)
- Re-engraved foot support
- Unfinished under Liberty's chin

### **Reverse K**

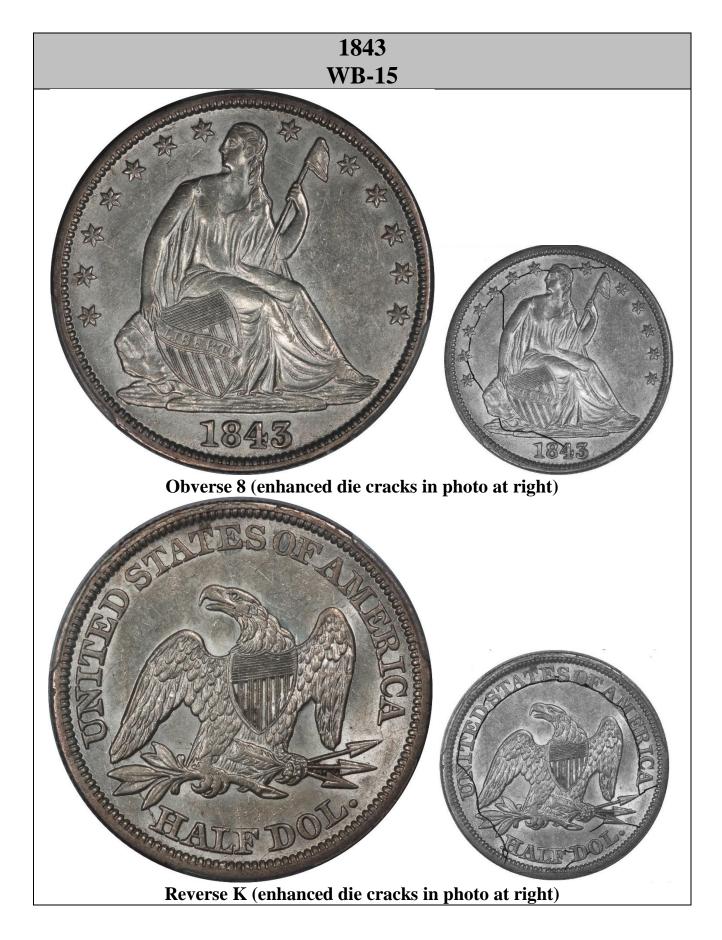
All examples seen:
 vertical shield lines D-2
 and D-3 are joined or
 D-2 is very thick (photo).
 On very high grade
 coins, D-2 is not joined
 but very thick.



- Since this die cracked on the previous use of this die, all examples will be cracked with circumferential die cracks (See enhanced die crack diagram on next page.)
- Clash in shield's lower right

This is the only use of this	obverse die and second use of this reverse die.

Date grid: M3.5, .022"	144 reeds		Typical di	ameter = 1.200"	Rarity - 3
Drapery die state: Full	Foot support: Fo		ull	ıll Dentils: Obverse - Full; Reverse	
Grade of coins depicted: PCGS AU55 and VG1			10	Coins from the Bill B	ugert Collection
Cross reference: WB-101.					Version 82.S



### 1843 WB-16 (Beistle-5J)

This die marriage is currently unknown. Based on M.L. Beistle's description of his variety "5 J" (scan of the text of that die marriage is imaged at right) in his 1929 reference, *A Register of Half Dollar Die Varieties and Sub-Varieties*, these descriptions match an early die state of obverse 5 and a late die state of reverse J. Beistle's obverse 5 may be an early die state of obverse 8 (on

1843 5 F. Low date. A die crack runs from the edge, at the foot and along the base of Liberty, down to the top of 8, and again up to the base of Liberty, and out to the edge through the first and second stars. There is a very heavy die crack from the eighth star, to Liberty's head, getting weaker on the left, and running through the seventh, and the sixth stars, to the edge.

1843 5a J. Same as No. 5, except it is perfect. Rev. J. The lines of two vertical stripes, on the right side of the shield, are over the lower cross bar. A die crack runs from the edge, below H in HALF, then through the lower left serif of H, joining at the base UNITED STATES OF AMERICA, with the upper arrow head. The collar is broken above TED STATES OF A.

WB-15) which would make this die marriage WB-15.

Beistle evidently saw this die marriage and reported it in his reference so we think it must exist. Randy Wiley, Dick Osburn, and I have been actively searching for an example of this die marriage for years without success. Perhaps a knowledgeable collector will find an example of Beistle's 5J.

#### Obverse 5

• See Beistle's description above.

#### Reverse K

Image below is of Reverse K on WB-15.

 All examples seen: vertical shield lines D-2 and D-3 are joined or D-2 is very thick (photo). On very high grade coins, D-2 is not joined but very thick.



- Since this die cracked on the previous use of this die, all examples will be cracked with circumferential die cracks (See enhanced die crack diagram on next page.)
- Clash in shield's lower right

This is the second use of this obverse die and third use of this reverse die.

An example of this die marriage is currently unknown and the rarity is unknown.

Date grid: M4, .028" Unknown reeds Typical diameter = Unknown" Rarity - 7?

Cross reference: WB-101. Version 82.S

1843 WB-16 (Beistle-5J) (Notional Images)



Obverse 5 (Image of Obverse 5 on WB-12)



Reverse K (enhanced die cracks of WB-15 in photo above)

# 1843 WB-17, Repunched Date

Obverse 9



• Date high (photo) repunched obliquely on all digits (photo below). The 1(843) is repunched north while the digits (1)843 are repunched south. This visibility of this repunching fades with die state.





- Diagonal (NE to SW) die lines in the rock support below the foot and off the end of the rock support (photo above left) and a possible errant digit 4 in the rock support below the gown fold (photo above right)
- Re-engraved foot support
- LDS: rim cud below date (seen on high grade coins only)





Diagonal die line in (AM)E(RICA) (photo)



- Heavily re-engraved vertical shield lines into the horizontal shield lines (photo)
- All examples seen: extensively cracked die (See enhanced die crack diagram on the next page.)

This is the first use of this obverse die and only use of this reverse die.

Date grid: M4, .015"	14	145 reeds		Typical diameter = 1.206"		Rarity - 3
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full		ll; Reverse - Full
Grade of coin depicted: El	DS -	MS61	E	EDS coin from the Randy Wiley Collection		
LDS - XF40			L	LDS coin from the Bill Bugert Collection		rt Collection
Cross reference: WB-102.						Version 82.S

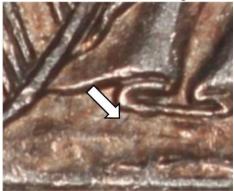


# 1843 WB-18, Repunched Date

Obverse 9



- Date high (photo) repunched obliquely on all digits (photo below). On the previous use of this die (WB-17), the date was repunched. That repunching is not now visible on this die marriage. Note also the rim cuds below the date.
- The diagonal (NE to SW) die lines in the rock support below the foot seen on the previous use of this die (WB-17) are either very weak or not visible on this die marriage.



- Possible errant digit 4 in the rock support below the gown fold (photo)
- Re-engraved foot support
- All die states: rim cuds along the rim from K-6 to K-8 (seen on high grade coins only)





- Vertical die line between olive leaves #3 and #4 (photo)
- All examples seen: extensively cracked die (See enhanced die crack diagram on the next page.)

This is the second use of this obverse die and only use of this reverse die.

Date grid: M4, .018"	145 reeds		Typical	dia	ameter = 1.206"	Rarity - 3
Drapery die state: Full		Foot support: F	nll Dentils: Obverse - Weak; Reverse			; Reverse - Full
Grade of coin depicted: PCGS AU53					Coin from the Bill Bu	gert Collection
Cross reference: WB-102.						Version 82.S



# 1843 WB-19, Repunched 4

Obverse 10

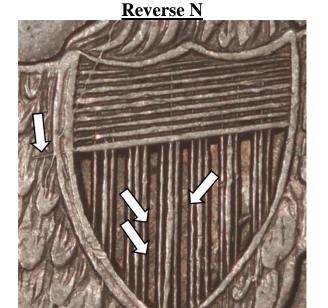


• Date slants up to right (photo). The (18)4(3) is repunched north with the doubling below the crossbar (photo).





- Horizontal die lines in Liberty's gown to the right of the shield (photo). Another diagonal die line in Liberty's lap to the left of the drapery.
- Re-engraved foot support
- VLDS: die crack thru stars 2-6 (See enhance die crack diagram on next page.)



- The lowest horizontal shield line extends far into the eagle's left wing (photo).
   Crisscrossing die lines between the shield's vertical lines (photo above).
- All examples seen: extensively cracked reverse. The cracking starts as a bisecting crack from K-1 to K-7 as seen on the earliest die states. (See enhanced die crack diagram on the next page.)

This is the first use of this obverse die and only use of this reverse die.

Date grid: M4, .024"	145 reeds		Typ	Typical diameter = 1.200"		Rarity - 3
Drapery die state: Full		Foot support: Full			Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: EDS - XF45				EDS coin from the Bill Bugert Collection		
LDS - PCGS AU50				LDS c	oin from the Scott Mich	kelson Collection
Cross reference: WB-103.						Version 82.S



## 1843 WB-20

#### **Obverse 10**



• Date (photo)



- Distinctively shaped die crack thru stars 2 6 (photo). (See enhanced die crack diagram on the next page.)
- Re-engraved foot support

Reverse O

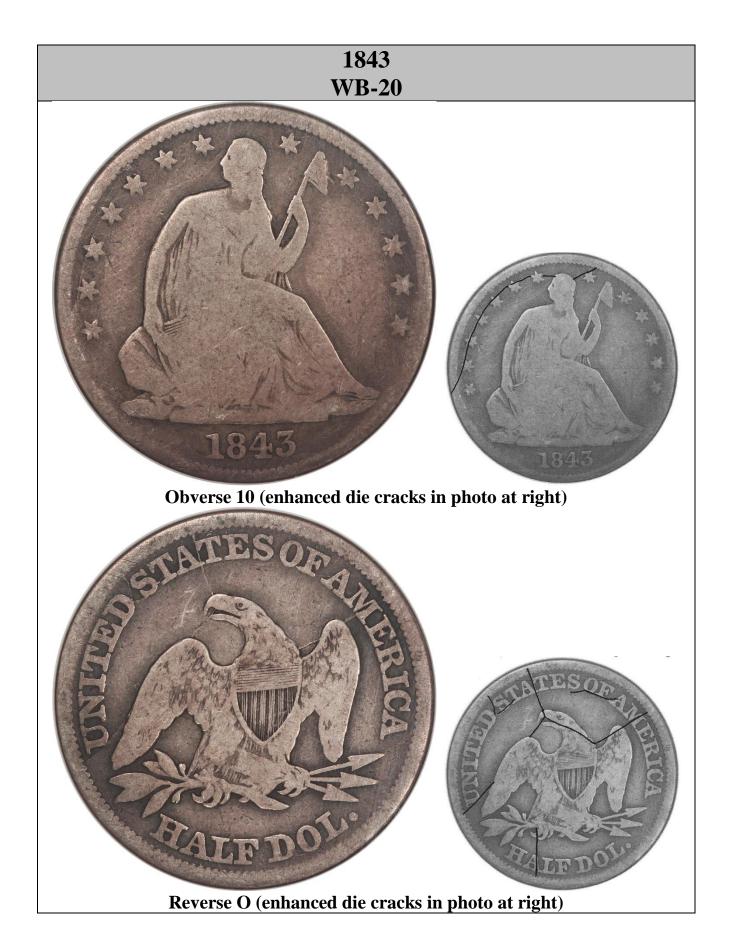


- Both examples seen: distinctively shaped die crack thru the eagle's beak and mouth (photo)
- Both examples seen: extensively cracked reverse die (See enhanced die crack diagram on the next page.)
- Clash in shield's lower right

This is the second use of this obverse die and only use of this reverse die.

I have seen only two examples of this die marriage – both low grade (the latest die state is shown here) and both owned by the same advanced collector. In years of searching, Randy Wiley, Dick Osburn, and I have been actively searching for this die marriage without success. The rarity may be understated.

Date grid: M3, .024"	14	145 reeds		Typical diameter = 1.198"		Rarity - 6
Drapery die state: Full	Foot support: Full		ull		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: NGC G4				Coin f	rom the Scott Mickelso	on Collection
Cross reference: WB-101.					Version 82.S	



# 1843 WB-21, Repunched 8

Obverse 11

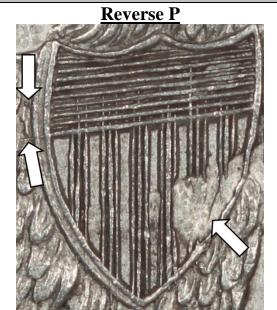


• Date (photo) with the (1)8(43) repunched south. The doubling shows on the outside top loop of the 8 (photo below).



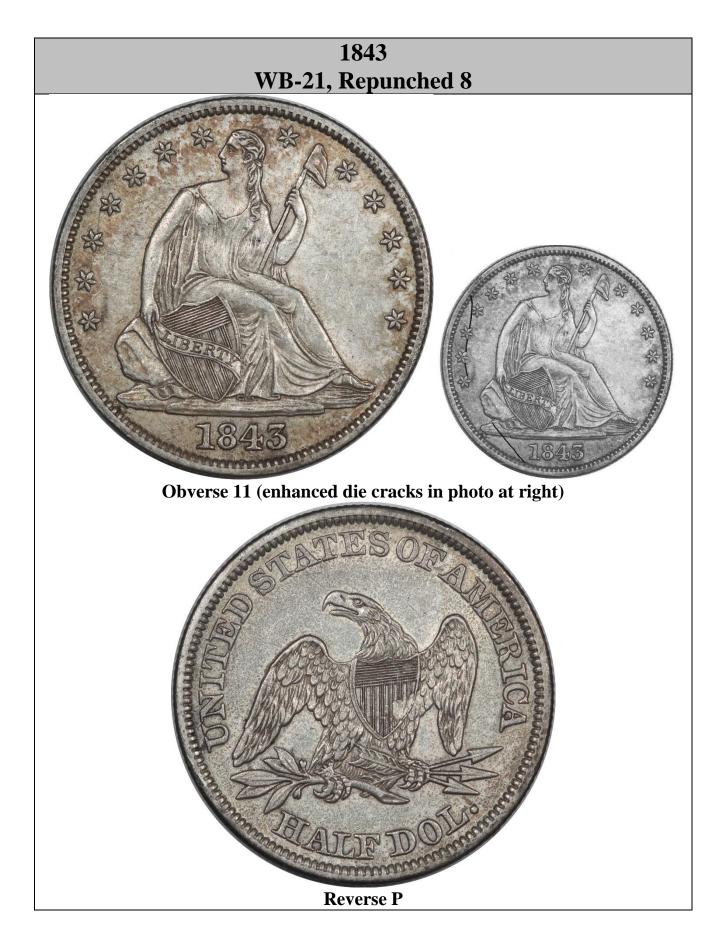


- Diagonal (NW to SE) die line in the shield's horizontal lines extending from Liberty's thumb (photo)
- Re-engraved foot support



- The lowest horizontal shield line extends far into the eagle's left wing; an additional diagonal die line extends from the left side of the shield (photo).
- This die has a very heavy clash in the reverse shield. The depth of this clash extends above the vertical shield stripes. This is sometimes misidentified as an internal cud (photo above). Interestingly, the obverse paired with this reverse is not clashed so this die must have been used with another obverse and it too will have a heavy clash. I have not seen an example of that die pair.
- This is the one of the few 1843 reverse dies that is not cracked. Perhaps a late die state with die cracks will be discovered.

<u> </u>							
This is the only use of this obverse die and only use of this reverse die.							
Date grid: M2, .020" 144 reeds Typ				ameter = 1.201"	Rarity - 3		
Drapery die state: Full Foot support: Full			ull	Dentils: Obverse - Fu	ll; Reverse - Full		
Grade of coin depicted: AU50				Coin from the Randy	Wiley Collection		
Cross reference: WB-Unlisted.					Version 82.S		



### 1843 WB-22

Obverse 12



• Date slants down to right (EDS photo). The earliest die state of this die marriage only has a faint crack along the base of the date (photo above).



• MDS (photo above)



- LDS (photo above). On low grade coins, these die breaks appear as cuds but they are actually heavy die cracks.
- Re-engraved foot support

This is the only use of obverse die and first use of this reverse die.

This die marriage is interesting and popular for the double die cracks at the date (on LDS coins).

Date grid: M3, .016"

145 reeds

Typical diameter = 1.207"

Rarity - 4

Drapery die state: Full

Grades of coin depicted: Many

Coins from the Randy Wiley and Bill Bugert Collections

Cross reference: WB-101.

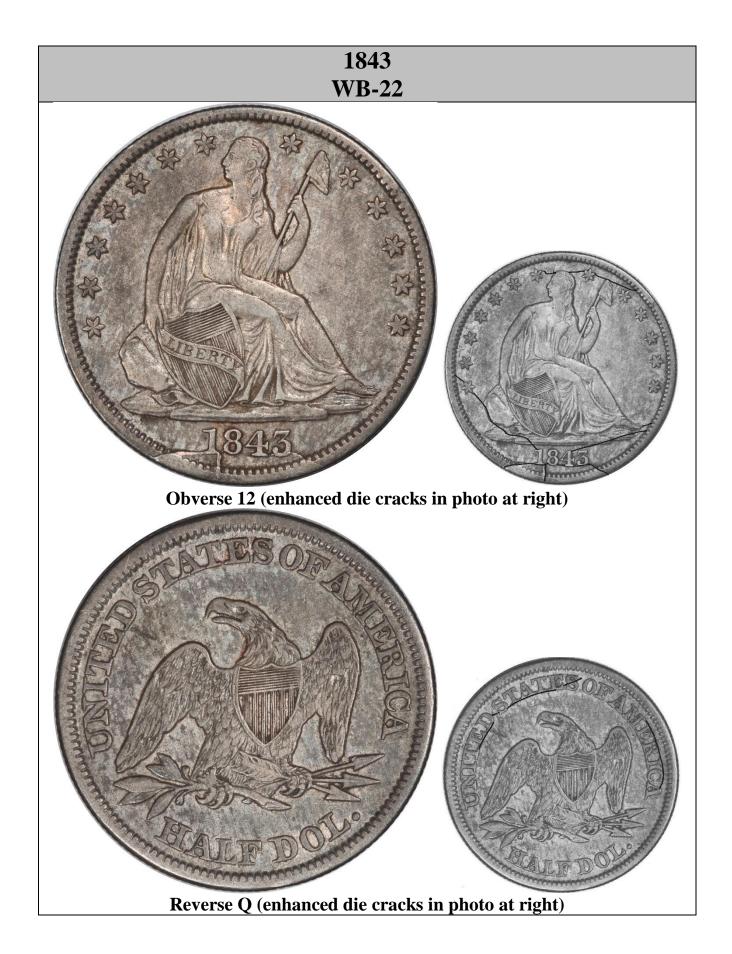
Version 82.S



Many die lines above STATES (photo).
 These die lines are visible on all die states although they are very weak on LDS coins.
 Other scattered die lines above AME(RICA) (photo below)



 LDS: few die cracks in the legend (See enhanced die crack diagram on the next page.)



## 1843 WB-23, Doubled Die Obverse

**Obverse 13** 



• Date left slants slightly down to right (photo)



 Slightly doubled obverse die with the doubling mostly evident on the lower edge of the scroll and the adjacent area of Liberty's gown (photo)



Multiple die lines in the field from the right end of the rock support and Liberty's foot (photo). Other die lines are adjacent Stars 8, 9, 12, and off the left end of the rock support.

### **Reverse R**



• Small lump on the upright of the (UNI)T(ED) (photo)



- EDS only. Diagonal die lines above (A)MER(ICA) (photo). This EDS also has the die crack from the eagle's left wing to (ST)A(TES) and from rim to olive leaf #3 to the eagle's lower left wing tip.
- Extensively cracked reverse; I have not seen this die uncracked. (See the enhanced die crack diagram on the next page.)
- Note: the die cracks on this reverse die are very similar to that seen on the next die marriage, WB-24, which uses the same obverse die. Study them carefully when attributing these die marriages.

, , , , , , , , , , , , , , , , , , ,						
This is the first use of this obverse die and only use of this reverse die.						
Date grid: M1, .020" 145 reeds Typical				al di	ameter = 1.207"	Rarity - 3
Drapery die state: Full Foot support: Full				Dentils: Obverse - Fu	ll; Reverse - Full	
Triage of coin depicted. Puts Allax and Allaa					ns from the Bill Bugert lections	and Randy Wiley
Cross reference: WB-Unlisted.						Version 82.S

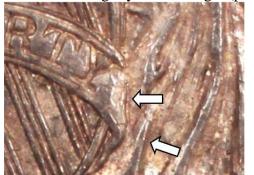


## 1843 WB-24, Doubled Die Obverse

#### **Obverse 13**



• Date left slants slightly down to right (photo)



• Slightly doubled obverse die with the doubling mostly evident on the lower edge of the scroll and the adjacent area of Liberty's gown (photo)



• Multiple die lines in the field from the right end of the rock support and Liberty's foot (photo). Other die lines are adjacent Stars 8, 9, 12, and off the left end of the rock support.

#### **Reverse S**

- Extensively cracked reverse; I have not seen this die uncracked. (See the enhanced die crack diagram on the next page.)
- Note: the die cracks on this reverse die are very similar to that seen on the previous die marriage, WB-23, which uses the same obverse die. Study them carefully when attributing these die marriages and note the extra die crack at K-3 on this reverse.

This is the second use of this obverse die and only use of this reverse die.

This is the second use of this obverse the and only use of this reverse the.					
Date grid: M1, .020"	unknown reeds		Typical diameter = unknown		Rarity - 6
Drapery die state: Full	Foot support: I		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PCGS AU58				Coin from the Dick Osburn Collection	
Cross reference: WB-Unlisted.					Version 82.S



## 1843 WB-25, Doubled Die Obverse

Obverse 13



• Date left slants slightly down to right (photo). Note the rim cuds below the date.



- Slightly doubled obverse die with the doubling mostly evident on the lower edge of the scroll and the adjacent area of Liberty's gown (photo)
- The multiple die lines in the field from the right end of the rock support and Liberty's foot seen on the previous uses of this die are now very weak to not visible.
- See enhanced die crack diagram on the next page.

Cross reference: WB-Unlisted.

### **Reverse Q**

- The die lines above STATES seen on the previous use of this die are now very weak.
- Extensively cracked reverse; I have not seen this die uncracked. (See the enhanced die crack diagram on the next page.)

Version 82.S

• Rim cuds at K-7

1 0						
This is the third use of this obverse die and second use of this reverse die.						
Date grid: M1, .020"	145 reeds		Typical diameter = 1.208"		Rarity - 3	
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: XF45			Coin from the Randy Wiley Collection			

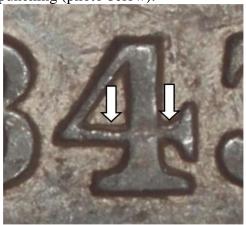


# 1843 WB-26, Repunched 4

#### **Obverse 14**



• Date right (photo) with the (18)4(3) repunched south. The crossbar of the 4 shows repunching (photo below).



- Clash in drapery below Liberty's elbow
- Re-engraved foot support
- Liberty has roughness from die rust.
- See enhanced die crack diagram on the next page.

### **Reverse** T

- No usable die diagnostics seen other than die cracks
- Extensively cracked reverse; I have not seen this die uncracked. (See enhanced die crack diagram on the next page.)
- Note: the die cracks on this reverse die are very similar to that seen on reverse dies R and S used on die marriages WB-23 and WB-24. Study them carefully when attributing these die marriages.

This is the first use of this obverse die and only use of this reverse die.

J						
Date grid: M4, .022"	144 reeds		Typical diameter = 1.203"		Rarity - 3	
Drapery die state: Full	Foot support:		ull	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU50			Coin from the Randy Wiley Collection			
Cross reference: WB-Unlisted.				Version 82.S		



# 1843 WB-27, Repunched 4

Obverse 14



• Date right (photo) with the (18)4(3) repunched south. The crossbar of the 4 shows repunching (photo below).



- Clash in drapery below Liberty's elbow
- Re-engraved foot support
- Liberty has roughness from die rust.
- Circumferential die crack (See enhanced die crack diagram on the next page.)

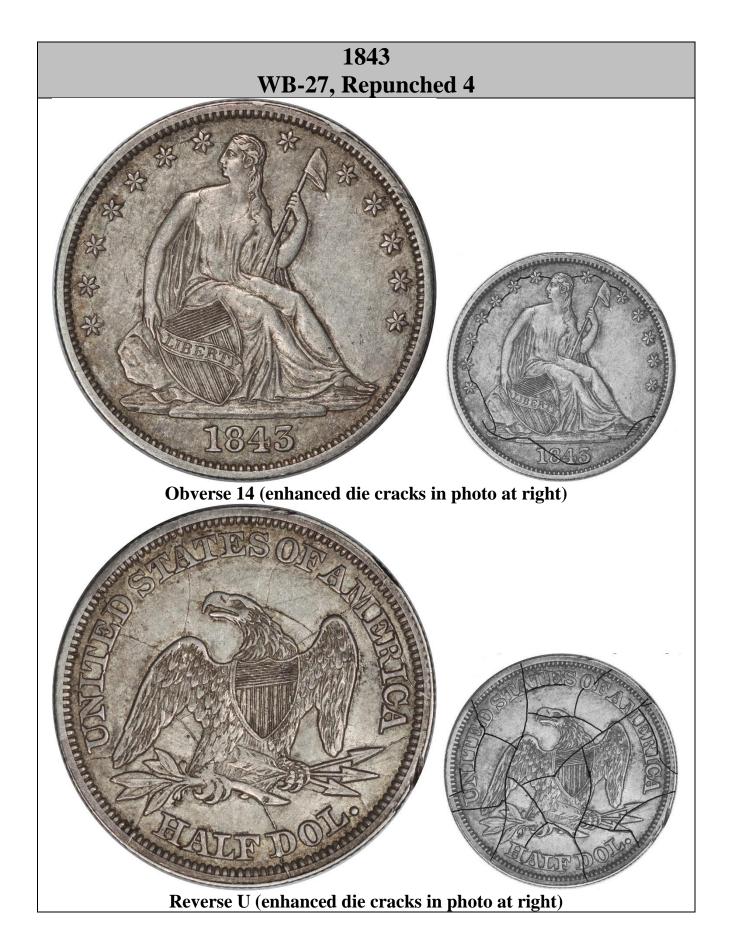


- All vertical shield stripes extend into the eagle's feathers but C-3 extends all the way to the arrow feathers (photo)
- All examples seen, shattered reverse die.
- In a LDS, this die is dramatically cracked. It is amazing that the Mint was able to strike half dollars with this die as it could not have lasted much longer. This reverse die is one of the most die cracked of any in the Liberty Seated half dollar series. (See enhanced die crack diagram on the next page.)

This is the second use of this obverse die and only use of this reverse die.

For all the reverse die cracks, the depicted coin is one of my favorites in my reference collection; hence, it is on the cover of this Register.

Date grid: M3.5, .020"	144 reeds		Typical diameter = 1.202"		Rarity - 3
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PCGS XF45				Coin from the Bill Bugert Collection	
Cross reference: WB-Unlisted.					Version 82.S



# 1843 WB-28, Repunched 4

#### **Obverse 14**



• Date right (photo) with the (18)4(3) repunched south. The crossbar of the 4 shows repunching (photo below).



- Clash in drapery below Liberty's elbow
- Re-engraved foot support
- Liberty has roughness from die rust.
- Circumferential die crack (See enhanced die crack diagram on the next page).

### Reverse V

- No usable die diagnostics seen other than die cracks
- Only example seen: cracked reverse. (See enhanced die crack diagram on the next page.)

This is the third use of this obverse die and only use of this reverse die.

I have seen only one example of this die marriage. The rarity may be understated.

Date grid: M3.5, .021" Unknown reeds Typical diameter = Unknown" Rarity - 6

Drapery die state: Full Foot support: Full Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: NGC AU58 Coin from the Dick Osburn Collection

Cross reference: WB-Unlisted. Version 82.S



### 1843 WB-29, Center Dot

Obverse 15



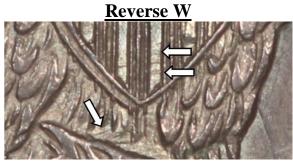
• Date slants down to right (photo)



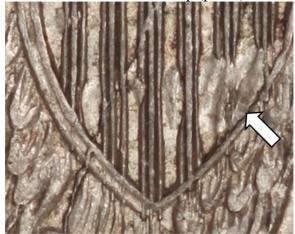
 Large "hole" on Liberty's left leg is a reverse image of a compass layout center point passed down from the working hub to the working die (photo). This hole appears on all coins regardless of grade.



- Diagonal lines between Liberty's legs below her knees (photo). Other scattered lines at the junction of the pole and Liberty's right arm.
- Multiple clash marks in the fields to the right of Liberty's drapery and from Liberty's left wrist



between the vertical shield lines and in the feathers below the shield tip (photo)



- All die states: clash in shield's lower right which increases in size with advancing die state and additional clashing (photo)
- Extensively cracked reverse; I have not seen this die uncracked. (See enhanced die crack diagram on the next page.)

This is the first use of this obverse die and only use of this reverse die.

The use of two different collars with different reed counts indicates this die marriage was struck at the Mint in at least separate batches.

Date grid: M3, .016"	OS - 144 reeds OS - 145 reeds	Typical di	ameter = EDS - 1.207" LDS - 1.199"	Rarity - 3	
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Full;	Reverse - Full
Grade of coin depicted: Po	S XF45		Coin from the Bill Buger	rt Collection	
Cross reference: WB-104.					Version 82.S



### 1843 WB-30, Center Dot

Obverse 15



Date slants down to right (photo)



• Large "hole" on Liberty's left leg is a reverse image of a compass layout center point passed down from the working hub to the working die (photo). This hole appears on all coins regardless of grade.



- Diagonal lines between Liberty's legs below her knees (photo). Other scattered lines at the junction of the pole and Liberty's right arm.
- Multiple clash marks in the fields to the right of Liberty's drapery and from Liberty's left wrist

Reverse X

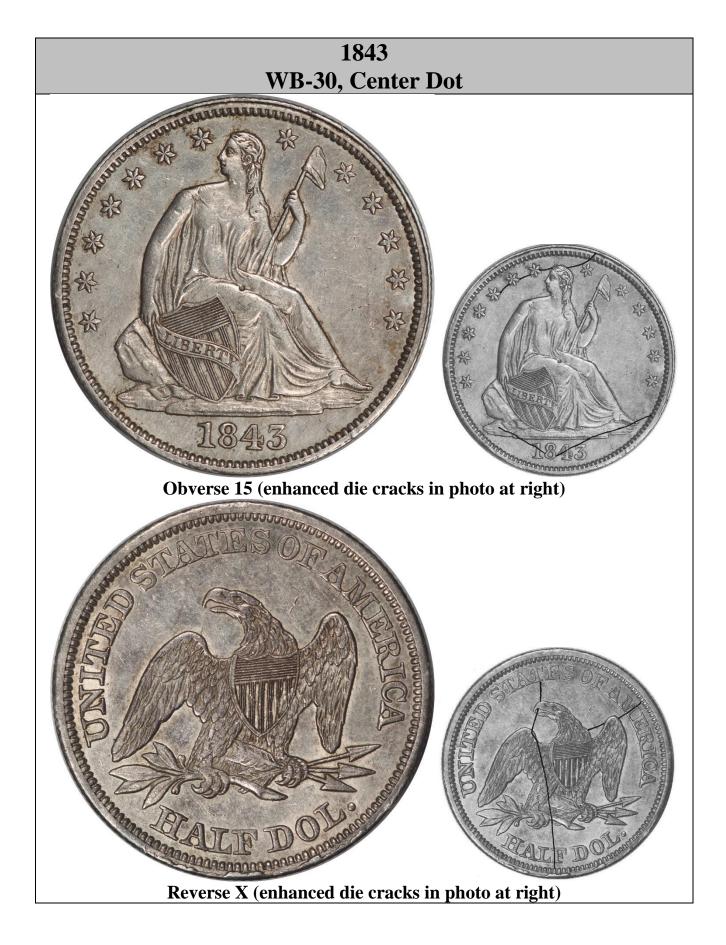


 Small lump on the inside lower left base of the (UN)I(TED) (photo)



- Most vertical shield stripes extend into the eagle's feathers but D-1 extends all the way to the arrow feathers (photo)
- Bisecting reverse crack; I have not seen this die uncracked. (See enhanced die crack diagram on the next page.)
- All die states: clash in shield's lower right
- Rim cuds from K-3 thru K-7

This is the second use of this obverse die and only use of this reverse die.										
Date grid: M3, .014"	14	4 reeds Typical diameter = 1.201"			Rarity - 3					
Drapery die state: Full	Foot support: F	ull	Dentils: Obverse - Fu	ll; Reverse - Full						
Grade of coin depicted: A	U53			Coin from the Randy	Wiley Collection					
Cross reference: WB-104	•	•			Version 82 S					



### 1843 WB-31, Center Dot

#### **Obverse 15**



• Date slants down to right (photo)



• Large "hole" on Liberty's left leg is a reverse image of a compass layout center point passed down from the working hub to the working die (photo). This hole appears on all coins regardless of grade.



- Diagonal lines in between Liberty's legs (photo). Other scattered lines in the junction of the pole and Liberty's right arm.
- Clash in the field to the right of Liberty's drapery and from Liberty's left wrist

### Reverse Y

- No usable die diagnostics seen other than die cracks
- All examples seen: extensively cracked reverse. (See enhanced die crack diagram on the next page.)
- Weak clash in shield's lower right

This is the third use of this obverse die and only use of this reverse die.

		<i></i>				
Date grid: M3, .015"	144 reeds		Typical diameter = 1.198"		Rarity - 3	
Drapery die state: Full	Foot support: F	ull	Dentils: Obverse - Fu	ll; Reverse - Full		
Grade of coin depicted: PCGS AU53				Coin from the Bill Bu	gert Collection	
Cross reference: WB-104.					Version 82.S	



### 1843 WB-32, Center Dot

Obverse 15



• Date slants down to right (photo)



 Large "hole" on Liberty's left leg is a reverse image of a compass layout center point passed down from the working hub to the working die (photo). This hole appears on all coins regardless of grade.



- Diagonal lines in between Liberty's legs (photo). Other scattered lines in the junction of the pole and Liberty's right arm.
- Clash in the field to the right of Liberty's drapery and from Liberty's left wrist

Reverse Z



 Small diagonal die line from dentil above (AM)E(RICA) (photo). Other very small die lines below the denomination.



- All die states: heavy raised clash in shield's lower right (photo). This is sometimes misidentified as an internal cud. Note also the split top on vertical shield line C-3.
- All examples seen: die cracks thru the legend. (See enhanced die crack diagram on the next page.)



• Distinctive die crack thru (UNIT)ED STA(TES) with a small "loop" crack at the base of (S)TA(TES) (photo).

This is the fourth use of this obverse die and first use of this reverse die.								
Date grid: M3, .016"	14	5 reeds	Typical di	ameter = 1.204"	Rarity - 3			
Drapery die state: Full	Foot support: F	'ull	Dentils: Obverse - Full; Reverse - Full					
Grade of coin depicted: N	GC	MS61		Coin from the Randy Wiley Collection				
Cross reference: WB-104.					Version 82.S			



## 1843 WB-33, Repunched 4

Obverse 16



• Date (photo) with the (18)4(3) slightly repunched north with doubling below the crossbar and serif (photo below)

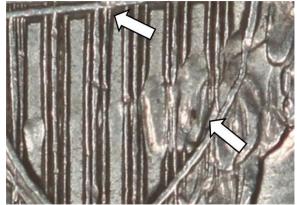




- Small die line from the drapery below Liberty's elbow (photo)
- Re-engraved foot support

Reverse Z

• The small diagonal die line from dentil above (AM)E(RICA) seen on the previous use of this reverse die (WB-32) is not now visible.



- All die states: heavy raised clash in shield's lower right (photo). This is sometimes misidentified as an internal cud. Note also the split top on vertical shield line C-3.
- All examples seen: die cracks thru the legend. (See enhanced die crack diagram on the next page.)



 Distinctive die crack thru (UNIT)ED STA(TES) with a small cud at the base of (S)TA(TES). (photo)

This is the first use of this obverse die and second use of this reverse die.

An example of this die marriage is known with a railroad rim.

Date grid: M3.5, .020"	145 reeds		Typical diameter = 1.203"		Rarity - 3	
Drapery die state: Full	Orapery die state: Full Foot support: F			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: X	F45			Coin from the Randy	Wiley Collection	
Cross reference: WB-103.				Version 82.S		



### 1843 WB-34, Repunched 4

Obverse 16



• Date (photo) with the (18)4(3) slightly repunched north with doubling below the crossbar and serif (photo below)



- The small die line from the drapery below Liberty's elbow seen in the previous use of this die (WB-33) is now very weak and not visible on LDS coins.
- (See enhanced die crack diagram on the next page.)
- Re-engraved foot support

**Reverse AA** 

- No usable die diagnostics seen other than die cracks
- EDS: initial die crack along the base of STATES
- LDS: extensively cracked reverse. (See enhanced die crack diagram on the next page.)
- Very weak clash in shield's lower right

This is the second use of this obverse die and only use of this reverse die.								
Date grid: M3.5, .020"	14	5 reeds	Typical di	ameter = 1.204"	Rarity - 3			
Drapery die state: Full	Foot support: F	ull	Dentils: Obverse - Full; Reverse - Full					
Grade of coin depicted: A	U55			Coin from the Randy Wiley Collection				
Cross reference: WB-103.					Version 82.S			





Obverse 16 (enhanced die cracks in photo at right)



## 1843 WB-35, Triple Punched 43

Obverse 17



• Date (photo) with the digits (18) 43 repunched three times. The most visible remnants are on the crossbar of the 4 and above and below the 3 (photo below).





- Scattered die lines notable above star 7, 9 (photo), star13, above Liberty's head, and right of the rock support by Liberty's foot.
- Re-engraved foot support

**Reverse BB** 



- Short radial die lines above (A)MER(ICA) (photo) [Note diagonal die line in R] and other die lines above (UNI)TE(D)
- MDS-LDS: bisecting die crack from K-1 to K-7 (See enhanced die crack diagram on the next page.)
- Clash in shield's lower right

Re-engraved foot support	ort							
This is the first use of this obverse die and first use of this reverse die.								
Date grid: M2, .018"	14	5 reeds	Typical di	ameter = 1.207"	Rarity - 3			
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Fu	ll; Reverse - Full			
Grade of coin depicted: X	F45			Coin from the Bill Bu	gert Collection			
Cross reference: WB-Unli	sted	l, different than 10	05.		Version 82.S			



### 1843 WB-36, Triple Punched 43

Obverse 17



• Date (photo). The triple punched date seen on the previous use of this die (WB-35) now has only remnants of the tripling below the crossbar of the 4 (photo below).



- The scattered die lines seen on the previous use of this die (WB-35) are now very light or not visible.
- Re-engraved foot support
- Rim cuds from K-11 to K-2 seen on high grade coins
- Die crack along the base of the date (See enhanced die crack diagram on the next page.)





- Rust patch between olive leaves #3 and #4 and the eagle's lower left wing tip. Rust along the upper edge of olive leaf #3 (photo) and on top of olive leaf #2 (seen on high grade coins only)
- All examples seen: bisecting die crack from K-11 to K-6 (See enhanced die crack diagram on the next page.)
- Clash in shield's lower right

This is the second use of this obverse die and only use of this reverse die.

Date grid: M2, .018"	5 reeds	Typical o	diameter = 1.203"	Rarity - 3	
Drapery die state: Full	Foot support: F	ull	Dentils: Obverse - Wea	ık; Reverse - Full	
Grade of coin depicted: X	F40			Coin from the Bill Bu	gert Collection
Cross reference: WB-Unli	sted	, different than 10	)5.		Version 82.S



## 1843 WB-37, Repunched 3

#### **Obverse 18**



• Date (photo) with the (184)3 repunched north (photo below)





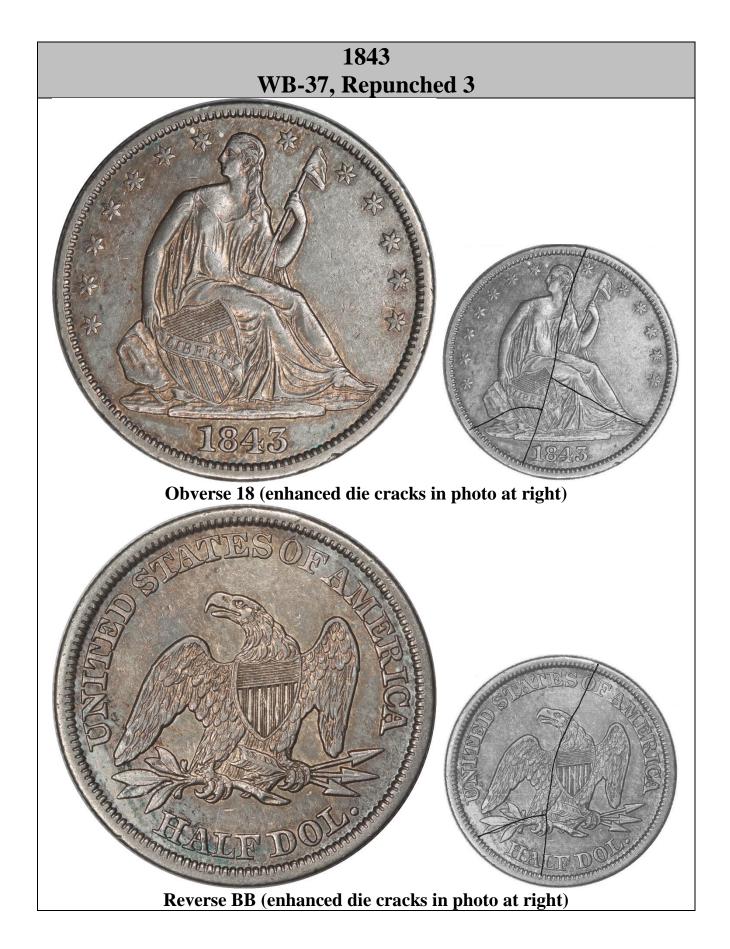
- EDS-MDS: die lines into the right field from drapery below Liberty's elbow; others from to the left of the pole (photo) and from the right shin
- All examples seen: bisecting die crack from K-1 thru the (LIBE)R(TY) to K-7 (photo)

#### **Reverse BB**

- The radial die lines seen on the previous use of this die (WB-35) are not now visible.
- All examples: bisecting die crack from K-1 to K-7 (See enhanced die crack diagram on the next page.). This die crack was on the previous use of this die (WB-35) so it will be on all examples of this die marriage.
- Clash in shield's lower right

This is the only use of this obverse die and second use of this reverse die.

Date grid: M2, .018"	grid: M2, .018" 145 reeds		Typical diameter = 1.204"		Rarity - 3	
Drapery die state: Full Foot support: 1			ull	Dentils: Obverse - Fu	ll; Reverse - Full	
Grade of coin depicted: AU53				Coin from the Bill Bu	gert Collection	
Cross reference: WB-Unli	isted	l.			Version 82.S	



### 1844

Like 1843, if extensive die cracks and repunched dates interest you, 1844 is the date for you. With fifteen die marriages composed of 10 obverse dies and 12 reverse dies, almost all reverse dies are extensively cracked and almost all obverse dates have repunched and/or misplaced dates. Additionally, all dies generally produce fully struck coins, are relatively easy to attribute, and this date is commonly available and affordable in most grades.

Fifteen die marriages are known as depicted in the tables below.

N	Mintage	Number of Die Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
1,	,766,000	15	10	12	3 (143, 144, 145)

# 1844 date grid quick reference table

Obverse die date grid	Die Marriage
M1, .016"	WB-9
M1, .018"	WB-10
M1.5, .018"	WB-1
M1.5, .018"	WB-2
M1.5, .018"	WB-3
M1.5, .018"	WB-8
M1.5, .027"	WB-5
M2, .018"	WB-4
M2, .020"	WB-15
M2.5, .018"	WB-11
M2.5, .020"	WB-14
M3, .024"	WB-6
M3, .024"	WB-7
M3.5, .018"	WB-12
M3.5, .020"	WB-13

### **1844 Half Dollar Date Positions**



Obverse 1, WB-1, 2 44 Repunched North 44 in Dentils



Obverse 2, WB-3, 4 Overlapping 8s in Dentils



Obverse 3, WB-5 Repunched 844



Obverse 4, WB-6, 7 Date slants up to right Repunched 18



Obverse 5, WB-8 Repunched 84



Obverse 6, WB-9, 10 Repunched 844



Obverse 7, WB-11 Dramatically Repunched 844



Obverse 8, WB-12, 13 Date slants up to right

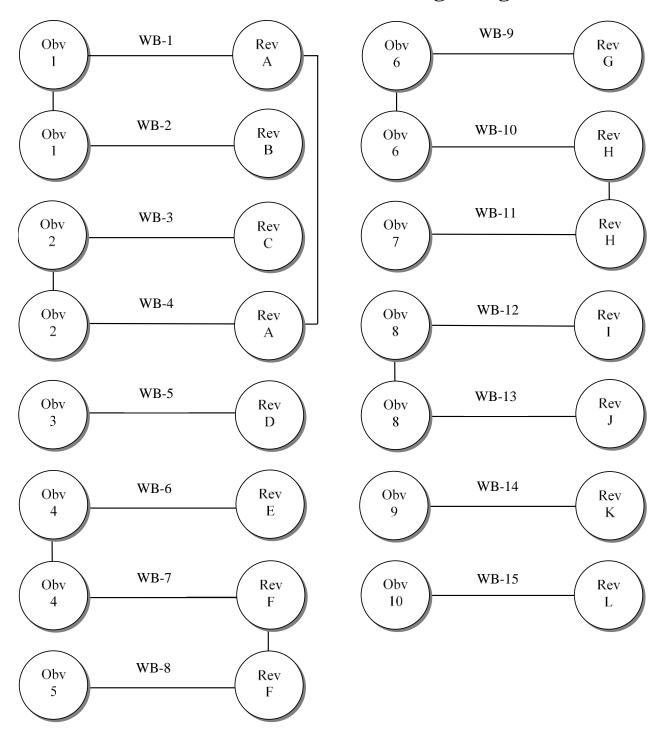


Obverse 9, WB-14 Repunched 44



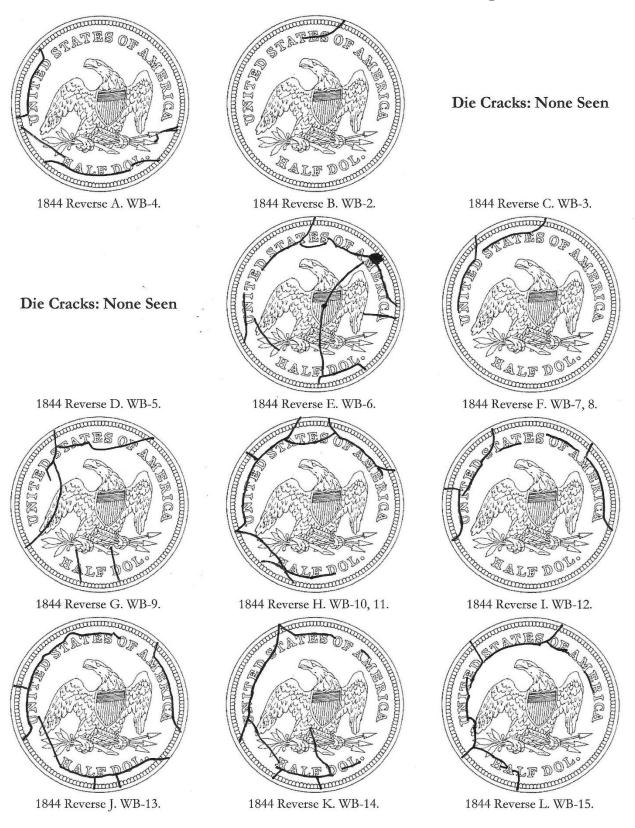
Obverse 10, WB-15 Date slants down to right

# 1844 Half Dollar Die Linkage Diagram



1844 Obverse a Reverse d identificati keys	ie	Thick arcing line in the dentils above UNIT(ED)	Attribution difficult: see die marriage narrative	Die lines in the field above the letters (AM)ER(ICA)	Diagonal die lines thru the olive leaves	Small tine from the eagle's left leg	Die line closes lower serif of S(TATES)	Die lines within the lower shield	Two heavy diagonal lines in the upper left corner of the lower shield	Attribution difficult: see die marriage narrative	Attribution difficult: see die marriage narrative	Small die lines from the dentils below (H)AL(F)	Two small tines from the eagle's wing and neck
44 Repunched		A	В	C	ע	L	Г	G	п	1	J	V	L
North, 44 in Dentils	1	WB-1	WB-2										
Overlapping 8s in Dentils	2	WB-4		WB-3									
Repunched 844	3				WB-5								
Repunched 18	4					WB-6	WB-7						
Repunched 84	5						WB-8						
Repunched 844	6							WB-9	WB-10				
Dramatically repunched 844	7								WB-11				
Crisscrossing die lines in the drapery below Liberty's elbow	8									WB-12	WB-13		
Repunched 44	9											WB-14	
Two tines from the dentils to star 10	10												WB-15

### 1844 Half Dollar Reverse Die Crack Diagrams



## 1844 WB-1, 44 Repunched North, 44 in Dentils

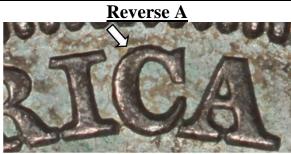
Obverse 1



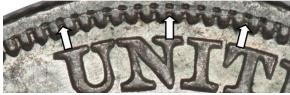
• Date slants down to right (photo). The digits (18)44 are obliquely repunched north with the repunching shown below the crossbar of the 44 and more so on the serif of the second 4. Additionally, there are the tops of the digits 44 in the dentils below the date. (photo below)





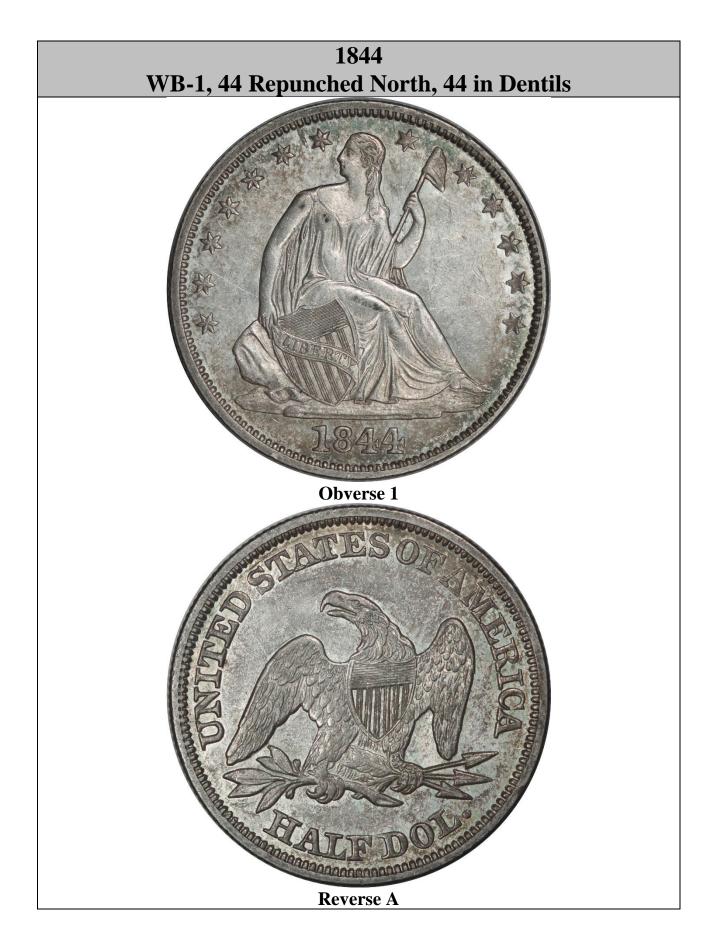


 Small lump on the outside upper edge of the (AMERI)C(A) (photo)



- Thick arcing line in the dentils above UNIT(ED) (photo)
- Clash in the shield's lower right

• Die lines in foot and at	tip	or root (pnoto)			
This is the first use of this obverse die and first use of this reverse die.					
Date grid: M1.5, .018" 143 reeds Typica			Typical di	ameter = 1.200"	Rarity - 4
Drapery die state: Full Foot support: Weak		Veak	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58				Coin from the Randy	Wiley Collection
Cross reference: WB-105.				Version 82.S	



### 1844 WB-2, 44 Repunched North, 44 in Dentils

**Obverse 1** 



• Date slants down to right (photo). The digits (18)44 are obliquely repunched north with the repunching shown below the crossbar of the 44 and more so on the serif of the second 4. Additionally, there are the tops of the digits 44 in the dentils below the date. (photo below)



• The die lines in foot and at tip of foot seen in the previous use of this die (WB-1) are not now visible.

Reverse B



 EDS only: die lines from dentils to (H)AL(F) and (D)O(L) (photo). Other die lumps and lines thru the eagle's left claw (photo below).





 MDS-LDS: distinctive arcing die crack thru (STA)TES to dentils above O(F) (photo)

Rarity - 3

• MDS-LDS: clash in shield's lower right

This is the second use of this obverse die and only use of this reverse die.							
Date grid: M1.5, .018"	143 reeds	Typical diameter = 1.201"					

Drapery die state: Full Foot support: Weak Dentils: Obverse - Full; Reverse - Full Grade of coin depicted: AU53 Coin from the Randy Wiley Collection

Cross reference: WB-105. Version 82.S



## 1844 WB-3, Overlapping 8s in Dentils

Obverse 2



• Date slants down to the right (photo above) with two overlapping (one above the other) upper loops of an 8 in the dentils below the right side of the (1)8(44) (photo below)





- Vertical die line (rust patch?) in the field from the instep of Liberty's foot (photo)
- Two diagonal die lines at the base of the pole in Liberty's lap

Reverse C

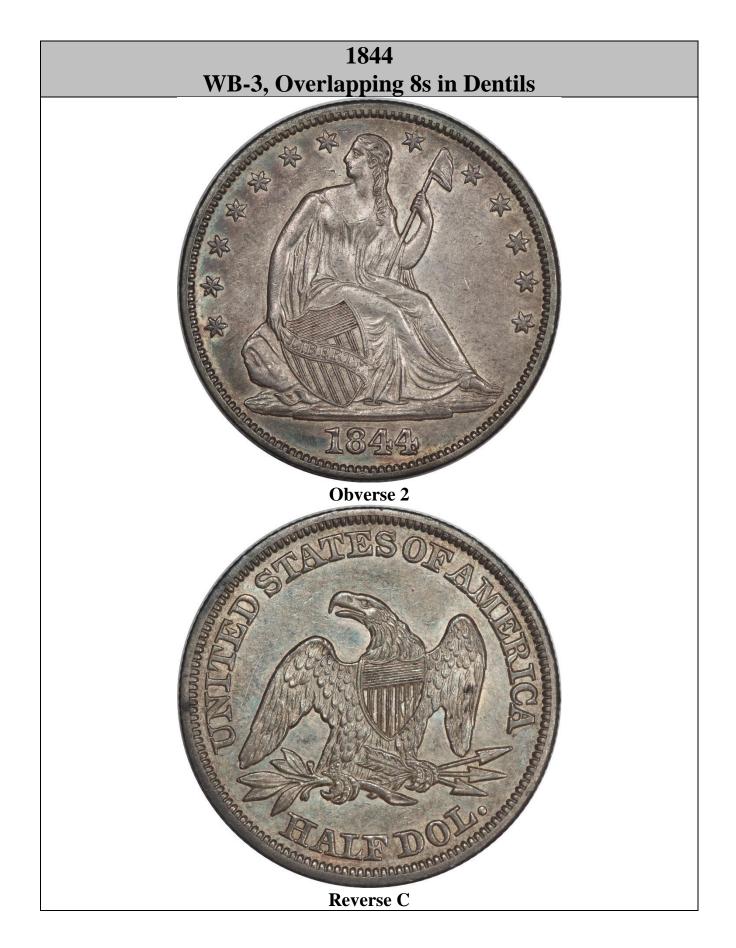


 Die lines in the field above the letters (AM)ER(ICA) (photo)



- Small vertical tine from the eagle's left wing (photo)
- Deep double clash in the shield's lower right

This is the first use of the obverse die and only use of this reverse die.					
Date grid: M2, .018"	143 reeds		Typical diameter = 1.200"		Rarity - 4
Drapery die state: Full	ry die state: Full Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU58				Coin from the Randy Wiley Collection	
Cross reference: WB-Unlisted.				Version 82.S	



### 1844 WB-4, Overlapping 8s in Dentils

Obverse 2



• Date slanting down to the right (photo above) with two overlapping (one above the other) upper loops of an 8 in the dentils below the right side of the (1)8(44) (photo below)





- Vertical die line (rust patch?) in the field from the instep of Liberty's foot (photo)
- Two diagonal die lines at the base of the pole in Liberty's lap

Reverse A



 Small lump on the outside upper edge of the (AMERI)C(A) (photo)



- Thick arcing line in the dentils above UNIT(ED) (photo)
- Clash in the shield's lower right
- LDS: die cracks thru the legend and denomination (See enhanced die crack diagram on the next page.)

This is the second use of this obverse die and second use of this reverse die.

Date grid: M2, .018"	143 reeds		Typical diameter = 1.200"		Rarity - 3
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45				Coin from the Bill Bugert Collection	
Cross reference: WB-Unlisted.				Version 82.S	



## 1844 WB-5, Repunched 844

Obverse 3



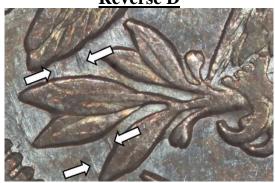
• Date (photo) low in the field with (1)84(4) repunched north and (184)4 repunched south (photo below)





• Crisscrossing clash marks in the drapery below Liberty's elbow suggesting that there was a double clash with a rotation between them (photo)



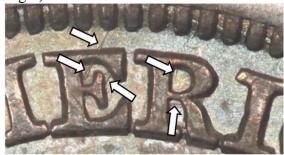


• Diagonal die lines thru the olive leaves (photo)





 Diagonal die line thru S(TATES) (photo above left) and thru (STATE)S (photo above right)



• Die lines thru (AM)ER(ICA) (photo)



- Horizontal die line nearly perpendicular to the shield's vertical lines (photo)
- Deep clash in the shield's lower right

This is the only use of this obverse die and only use of this reverse die.

Date grid: M1.5, .027"	143 reeds		Typical diameter = 1.202"		Rarity - 3
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU53				Coin from the Bill Bugert Collection	
Cross reference: WB-Unlisted.				Version 82.S	

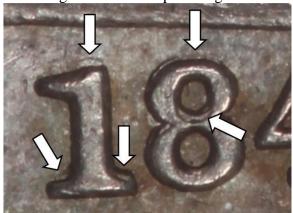


## 1844 WB-6, Repunched 18

Obverse 4



 Date slants up to right (photo). The 18(44) is repunched obliquely south (photo below).
 The initial punching of the date appears to be level and was then repositioned as slanted up to the right for the final punching.



- All die states: light to extensive die cracks (See enhanced die crack diagram on the next page.)
- Clash in drapery below Liberty's elbow

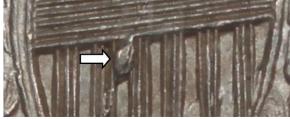
Reverse E



• Small tine from the eagle's left leg (photo). This tine is very strong on EDS coins.



 LDS only: crumbling die/cud in/below the dentils above (A)M(ERICA) (photo)



- MDS-LDS: small internal cud in the shield's vertical lines (photo). These internal cuds are rare in the Liberty Seated half dollar series but scarce on this die marriage.
- EDS: uncracked; MDS-LDS: light to extensive die cracks (See enhance die crack diagram on the next page.)
- EDS only: horizontal die lines in the lower shield
- Clash in the shield's lower right

This is the first use of this obverse die and only use of this reverse die.						
Date grid: M3, .024"	145 reeds		Typical diameter = 1.198"		Rarity - 3	
Drapery die state: Full		Foot support: Weak		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: PCGS AU55				Coin from the Bill Bugert Collection		
Cross reference: WB-102.					Version 82.S	

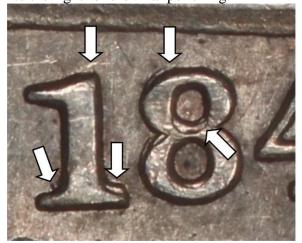


# 1844 WB-7, Repunched 18

**Obverse 4** 



• Date slants up to right (photo). The 18(44) is repunched obliquely south (photo below). The initial punching of the date appears to be level and was then repositioned as slanted up to the right for the final punching.



- All die states: extensive die cracks (See enhanced die crack diagram on the next page.)
- Clash in drapery below Liberty's elbow

Reverse F



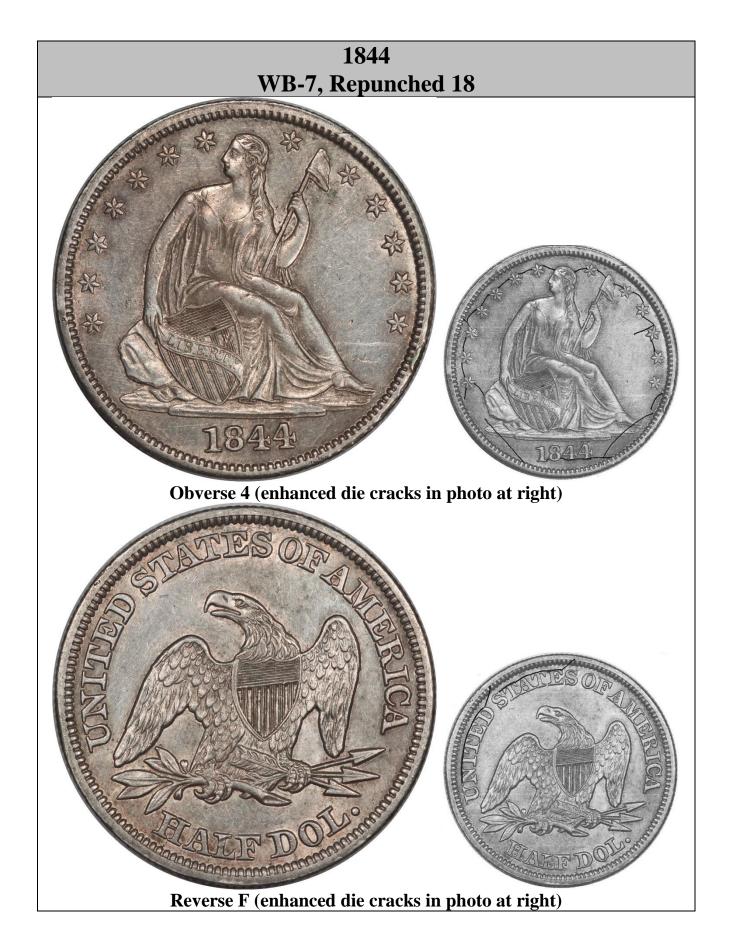
 Die line closes lower serif of S(TATES) (photo)



- Vertical die lines connect the lower two arrowheads (photo)
- All examples seen: die cracks thru the legend (See enhanced die crack diagram on the next page.)

This is the second use of the	is obverse	die and fi	irst use of this reverse die	

Date grid: M3, .024"	145 reeds		Typical diameter = 1.197"		Rarity - 3
Drapery die state: Full		Foot support: Weak		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: A	U55	i	Coin from the Bill Bu	gert Collection	
Cross reference: WB-102.				Version 82.S	



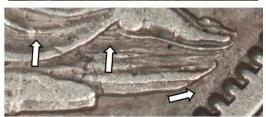
# 1844 WB-8, Repunched 84

**Obverse 5** 



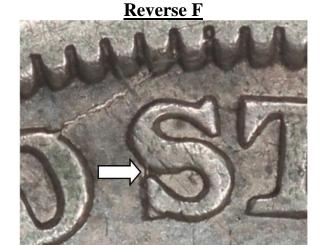
Date (photos) with 84 repunched





Horizontal die lines in rock support below the foot that extend into Liberty's gown; other die lines from rock support (photo)



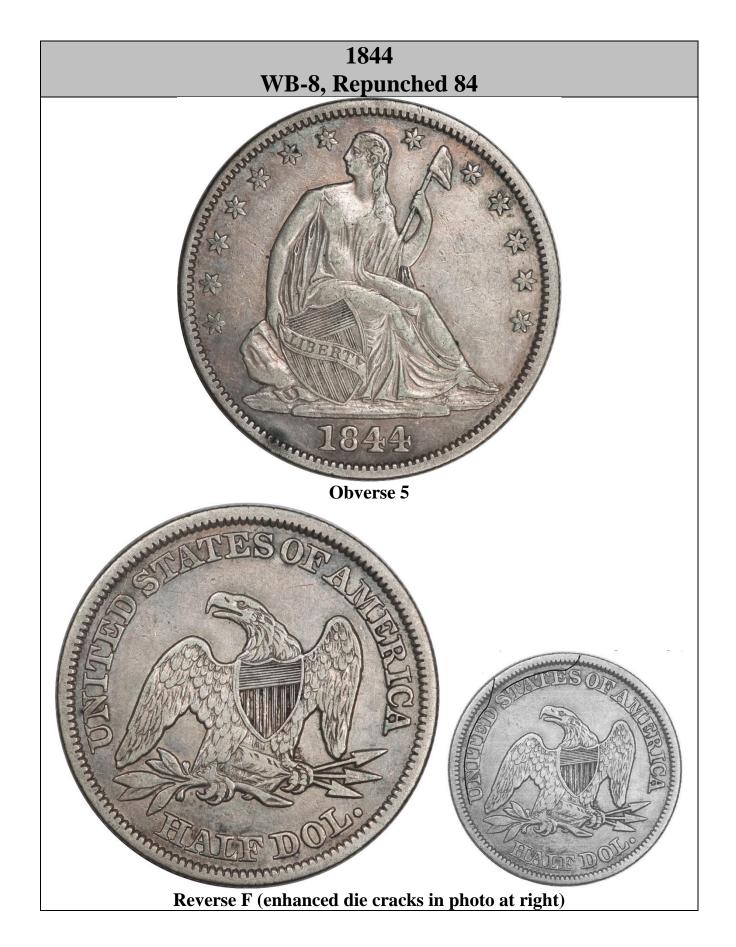


- Die line closes lower serif of S(TATES) (photo)
- The vertical die lines that connects the lower two arrowheads seen on the last use of this die (WB-7) are not now visible.
- All examples: die cracks thru the legend (See enhanced die crack diagram on the next page.)

Large arcing line on Liberty's leg (photo)

This is the only use of this obverse die and second use of this reverse die.

Date grid: M1.5, .018"	8"   145 reeds		Typical diameter = 1.196"		Rarity - 4
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse	
Grade of coin depicted: X	F40		Coin from the Bill Bugert Collection		
Cross reference: WB-Unli	stec			Version 82.S	



# 1844 WB-9, Repunched 844

Obverse 6

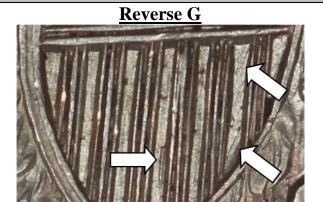


 Date (photo) with 844 repunched; 84 is repunched north while the second 4 is repunched south (photo below)





- Die line from the dentils near the left edge of the rock support (photo)
- MDS-LDS: die cracked (See enhanced die crack diagram on the next page.)



- Die lines within the lower shield: short shield line parallel to the left of vertical shield line
   D-1 and other diagonal lines (photo)
- All examples seen: light to extensive die cracks (See enhance die crack diagram on the next page.)
- Clash in the shield's lower right

crack diagram on the next page.)						
This is the first use of this obverse die and only use of this reverse die.						
Date grid: M1, .016"	: M1, .016" 145 reeds Ty		Ту	Typical diameter = 1.200"		Rarity - 3
Drapery die state: Full	Foot support: Full			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: EDS - AU58			EDS coin from the Randy Wiley Collection			
LDS - VF35			LDS coin from the Bill Bugert Collection			
Cross reference: WB-Unlisted.					Version 82.S	



### 1844 WB-10, Repunched 844

Obverse 6



• Date (photo) with 844 repunched; 84 is repunched north while the second 4 is repunched south (photo below)



- The die line from the dentils near the left edge of the rock support seen in the previous use of this die (WB-9) is not now visible.
- All examples: die cracked (See enhanced die crack diagram on the next page.)

**Reverse H** 



Two heavy diagonal lines in the upper left corner of the lower shield (photo). These lines are visible even on very low grade coins.



- All die states: many reverse die cracks thru legend and denomination; LDS: cud above (ST)A(TES) (photo). (See enhanced die crack diagram on the next page.)
- Clash in the shield's lower right

This is the second use of this obverse die and first use of this reverse die.						
Date grid: M1, .018" 145 reeds		Typical diameter = 1.196"		Rarity - 3		
Drapery die state: Full		Foot support: Weak		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: X	F40		Coin from the Bill Bu	gert Collection		
Cross reference: WB-Unli	stec	l.		Version 82.S		



### 1844 WB-11, Dramatically Repunched 844

Obverse 7



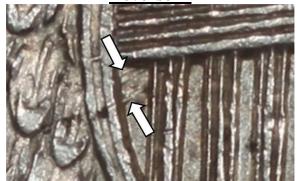
• Date (photo) with the (1)84(4) repunched north and the (18)44 repunched south. The 8 is repunched north, the first 4 is tripled, and the second 4 is repunched south (photo below).





- Short vertical die line in Liberty's gown to the right of the shield edge (photo)
- Clash in drapery below Liberty's elbow

Reverse H



- Two heavy diagonal lines in the upper left corner of the lower shield (photo). These lines are visible even on very low grade coins.
- All examples: extensively die cracks thru legend and denomination; LDS: cud above (ST)A(TES). (See enhanced die crack diagram on the next page.)
- Doubled clash in the shield's lower right

This is the only use of this obverse die and second use of this reverse die.

The rarity of this die marriage may be understated.

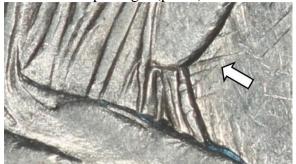
Date grid: M2.5, .018"	144 reeds		Typical diameter = 1.199"		Rarity - 5
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PO	CGS	Coin from the Bill Bu	gert Collection		
Cross reference: WB-104.					Version 82.S



Obverse 8

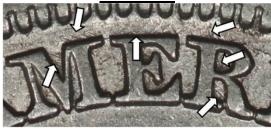


• Date slants up to right (photo)

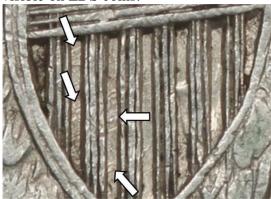


- Crisscrossing die lines and clash marks in the drapery below Liberty's elbow (photo)
- MDS-LDS coins: weak die cracks thru stars and along the base of the date (See enhanced die crack diagram on the next page.)





EDS-MDS only: many die lines on this die; above and thru (A)MER(ICA) (photo above) and others notably in the shield and above O(F) (photos below). These may not be visible on LDS coins.





- MDS-LDS coins: die cracks thru the legend and denomination (See enhanced die crack diagram on the next page.)
- MDS-LDS coins: clash in the shield's lower right

This is the first use of this obverse die and only use of this reverse die.						
Date grid: M3.5, .018"	144 reeds		Typical diameter = 1.203"		Rarity - 3	
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Full; Reverse - Full		
Litrade of coin denicted: X H/III X H/IS and A LISS				Coins from the Randy Bugert Collections	Wiley and Bill	
Cross reference: WB-101.					Version 82.S	



**Obverse 8** 

Date slants up to right (photo)

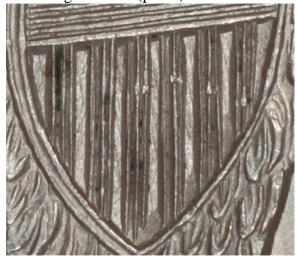


- Crisscrossing die lines and clash marks in the drapery below Liberty's elbow (photo)
- All examples: weak die cracks thru stars and along the base of the date (See enhanced die crack diagram on the next page.)





EDS-MDS: die lines from the eagle's upper left wing and neck (photo)



- EDS-MDS only: scattered die lines in the field beneath the shield's vertical lines (photo)
- All examples seen: weak to strong die cracks thru the legend and denomination (See enhanced die crack diagram on the next page.)

This is the second use of this obverse die and only use of this reverse die.						
Date grid: M3.5, .020"	14	145 reeds T		Typical diameter = 1.200"		Rarity - 3
Drapery die state: Full		Foot support: Full			Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: EDS - AU58				EDS coin from the Bill Bugert Collection		
LDS - MS63				LDS coin from the Randy Wiley Collection		
Cross reference: WB-101.					Version 82.S	

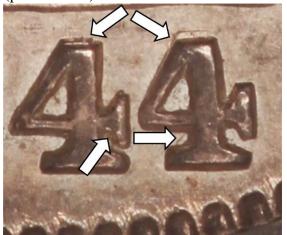


### 1844 WB-14, Repunched 44

**Obverse 9** 



Date (photo) with the (18)44 repunched south; obvious doubling shows above the digits (photo below)





EDS-MDS: many short radial die lines from

**Reverse K** 

- Small die lines from the dentils below (H)AL(F) (photo)
- LDS: clash in shield's lower right
- All examples seen: die cracks thru the legend and denomination (See enhanced die crack diagram on the next page.)

	== 2 1:12 2: maily short radius are miles from
	the dentils from K-5 to K-6 (see date photo
	and photo directly above)
_	Da an amazza d fa at assemble

Re-engraved foot support

This is the only use of this obverse die and only use of this reverse die.

145 reeds Date grid: M2.5, .020" Typical diameter = 1.197" Rarity - 3 Drapery die state: Full Foot support: Full Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: EDS - PCGS AU55 EDS coin from the Dick Osburn Collection LDS - XF40 LDS coin from the Bill Bugert Collection

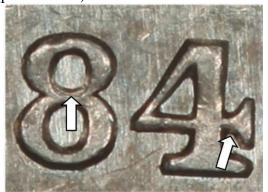
Cross reference: WB-103. Version 82.S



Obverse 10



• Date slants down to the right (photo) with very minor triple repunching of the (1)844 visible in the upper loop of the 8 and the lower edge of the crossbar and serif of the first 4 (photo below)





- Two tines from the dentils to star 10 (photo)
- Re-engraved foot support
- EDS: uncracked; MDS-LDS: cracked thru stars and to the left of date (See enhanced die crack diagram on the next page.)





- Two small tines from the eagle's wing and neck (photo)
- EDS: uncracked; MDS-LDS: cracked thru legend and denomination (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.

Date grid: M2, .020"	145 reeds		Ty	Typical diameter = 1.197"		Rarity - 3
Drapery die state: Full		Foot support: Full			Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: EDS - XF40				EDS coin from the Bill Bugert Collection		
LDS - VF30				LDS coin from the Randy Wiley Collection		
Cross reference: WB-Unlisted.						Version 82.S



### 1845

With a long rated status as a better date, 1845 half dollars are scarce but available in all circulated grades including XFs and AUs. Mint State coins are more difficult and a collector prize. With six die marriages, five of which are die linked, attributing them is relatively easy as there are sufficient die diagnostics to aid the attributor. As opposed to some other early 1840s half dollars, 1845 half dollars are usually fully struck.

Six die marriages are known as depicted in the tables below.

Mintage	Number of	Obverse	Reverse	Reed Counts
	Marriages	Dies	Dies	Known
589,000	6	4	4	2 (143, 144)

### 1845 date grid quick reference table

0 1	
Obverse die date grid	Die Marriage
L5, .030"	WB-1
M2.5, .016"	WB-2
M2.5, .016"	WB-3
M3, .028"	WB-6
M3.5, .020"	WB-4
M3.5, .028"	WB-5

### **1845** Half Dollar Date Positions



Obverse 1, WB-1 Repunched 84



Obverse 2, WB-2, 3



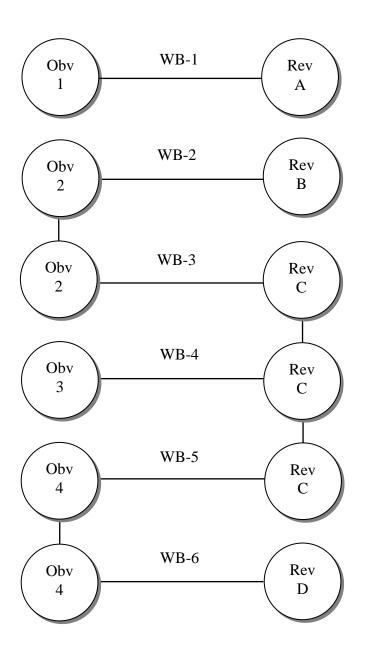
Obverse 3, WB-4



Obverse 4, WB-5, 6

Note the three very different rim cuds below the date.

# 1845 Half Dollar Die Linkage Diagram



1845 Obverse and Reverse die identification keys		Vertical shield lines A-1 and F-3 extend all the way to the top edge of the shield	Vertical die lines in the olive leaves	Small lumps on the lower edge of letters (U)NITED	Horizontal die line on the underside of the crossbar of the (AME)R(ICA)
		A	В	C	D
Repunched 84	1	WB-1			
	_		WD 0	WD 2	
Die line in and from the dentils above star 3 towards star 4	2		WB-2	WB-3	
	3		WB-2	WB-3	

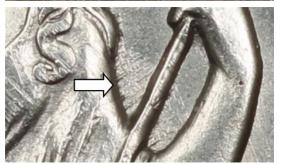
### 1845 WB-1, Repunched 84

**Obverse 1** 

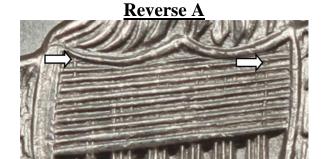


Date left (photo). The die is unfinished beneath the digits and, in EDS only, the digits (1)84(5) are repunched slightly north (photo below). Note: 84 is connected.





All examples seen: die lines along Liberty's



Vertical shield lines A-1 and F-3 extend all the way to the top edge of the shield (photo)

Rarity - 3

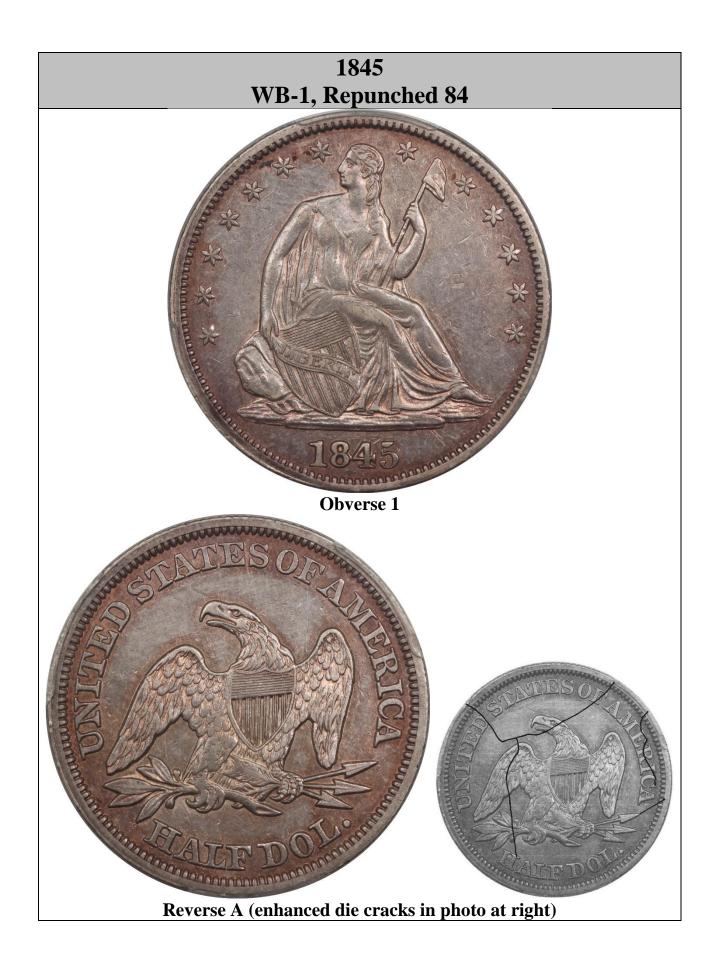
- EDS: uncracked, later die states are all cracked with the die cracks starting at (AM)ERI(CA) (See enhanced die crack diagram on the next page.)
- Clash in shield's lower right

right arm and shoulder (photo)

This is the only use of this obverse die and only use of this reverse die.						
Date grid: L5, .030"	144 r	eeds	Typical	diameter = 1.202"	Rarity	
Drapery die state: Full		Foot support:	Full	Dentils: Obverse - Ful	ll; Reverse - Full	

Grade of coin depicted: EDS - MS63 EDS coin from the Randy Wiley Collection LDS - PCGS AU50 LDS coin from the Bill Bugert Collection

Cross reference: WB-Unlisted. Version 82.S



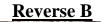
**Obverse 2** 



• Date high and slants slightly down to the right (photo)



- All examples seen: die line in and from the dentils above star 3 towards star 4 (photo)
- LDS: die crack thru stars 10-12 (See enhanced die crack diagram on the next page.)



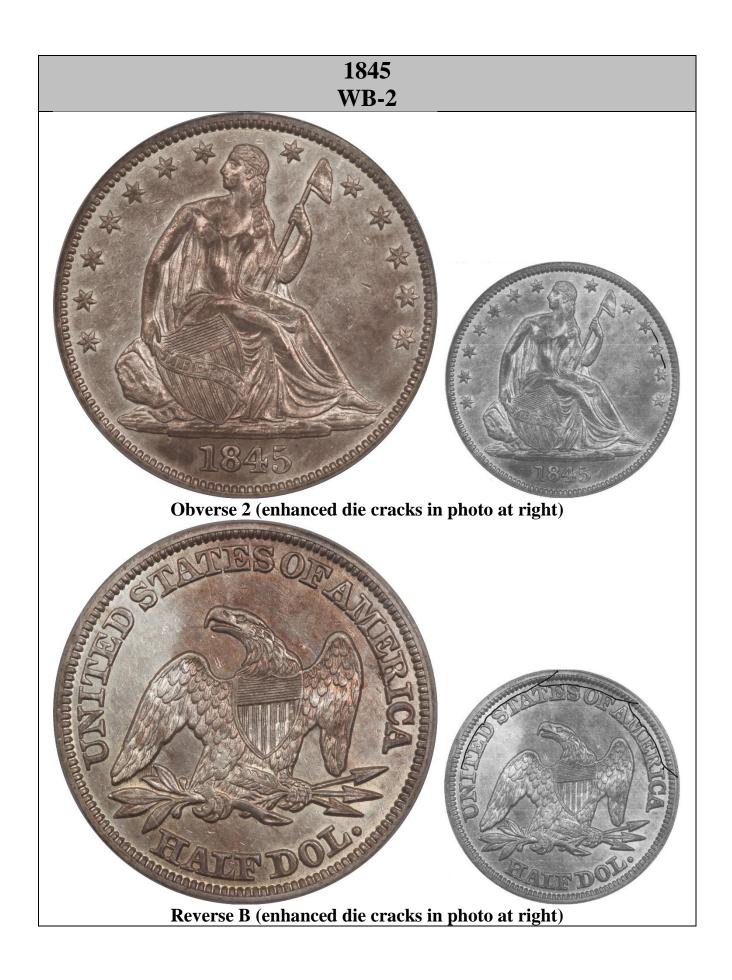


• Many vertical die lines in the olive leaves (photo); others on the arrow shafts.



- Small lump on the upper edge of the (STA)T(ES) (photo); EDS only: another on the lower edge of the right serif of the H(ALF)
- EDS: uncracked
- MDS-LDS: die cracks in the legend (See enhanced die crack diagram on the next page.)

This is the first use of this obverse die and only use of this reverse die.						
Date grid: M2.5, .016"	143 reeds		Typical diameter = 1.202"		Rarity - 3	
Drapery die state: Full Foot support:		Full	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: ICG AU53			Coin from the Bill Bugert Collection			
Cross reference: WB-101.					Version 82.S	



**Obverse 2** 



 Date high and slants slightly down to the right (photo) now with a rim cud (different from WB-4 and WB-5) that extends into the dentils below 18(45) that shows on coins grading XF+.



- EDS only: die line in and from the dentils above star 3 towards star 4 (photo) now much weaker than on the previous use of this die (WB-2)
- All die states: die crack thru stars 10-12 (See enhanced die crack diagram on the next page.)





• Thick horizontal line in the olive leaves #1-2 (photo)



- Small lumps on the lower edge of letters (U)NITED (photo) (D not shown)
- Clash in shield's lower right

r						
This is the second use of this obverse die and first use of this reverse die.						
Date grid: M2.5, .016" 143 reeds Typic		Typical	Typical diameter = 1.201" Rarity			
Drapery die state: Full Foot support: Full			Dentils: Obverse - Ful	ll; Reverse - Full		
Grade of coin depicted: AU58			Coin from the Randy V	Wiley Collection		
Cross reference: WB-101.					Version 82.S	





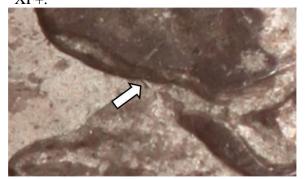
Obverse 2 (enhanced die cracks in photo at right)



Obverse 3



 Date more to the right than the previous die marriage (WB-3) paired with the same reverse (photo). Note the rim cud (different from WB-3 and WB-5) that extends into the dentils below (1)84(5) that shows on coins grading XF+.



- Small lump in the crotch formed by the rock and the rock support (photo)
- Rust in dentils from K-3 to K-9 (below date in photo far above)





• Thick horizontal line in the olive leaves #1-2 (photo)



- Small lumps on the lower edge of letters (U)NITED (photo)
- Clash in shield's lower right

F					
This is the only use of this obverse die and second use of this reverse die.					
Date grid: M3.5, .020" 143 reeds		Typical diameter = 1.203" Ra		Rarity - 4	
Drapery die state: Full Foot support: W			Veak	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU53				Coin from the Randy Wiley Collection	
Cross reference: WB-101					Version 82.S



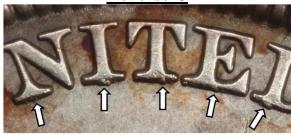
**Obverse 4** 



- Date lower than the previous die marriages (WB-3 and WB-4) paired with the same reverse (photo). Note the rim cud (different from WB-3 and WB-4) that extends into the dentils below (1)845 that shows on coins grading XF+.
- EDS only: small tine on the upper edge of the serif of the 1(845) (photo)



**Reverse C** 

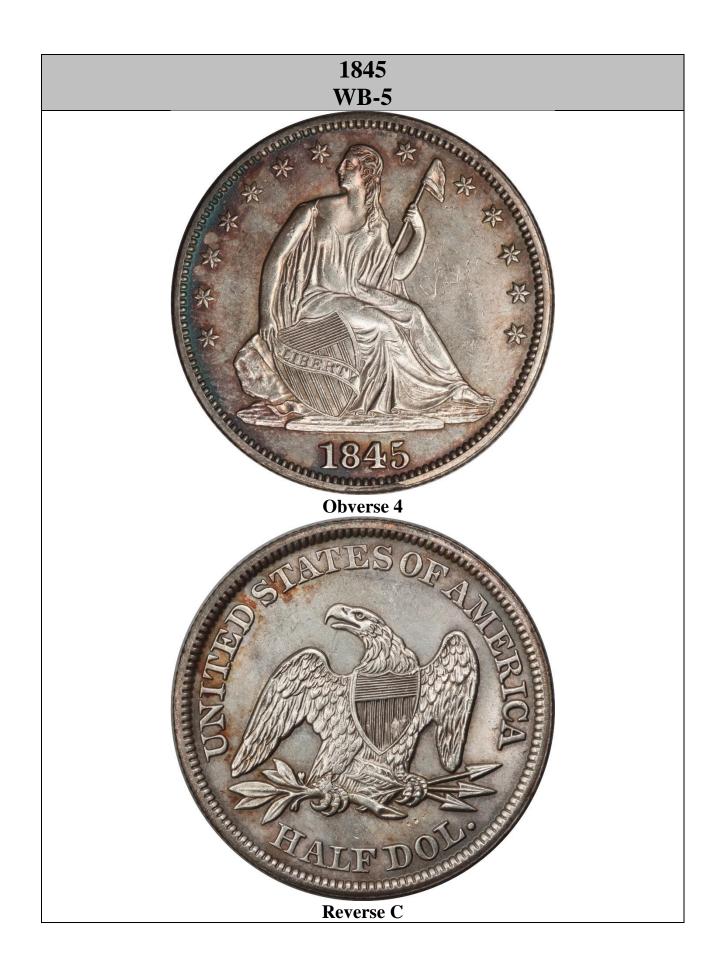


- Small lumps on the lower edge of letters (U)NITED (photo)
- The thick horizontal line in the olive leaves #1-2 seen in the previous uses of this die (WB-3 and WB-4) is not now visible.
- Clash in shield's lower right (now clashed at least three times - photo below). Note also the vertical shield lines on top of the lower left shield edge.



Clash in drapery below Liberty's elbow and in the field to the right of the drapery

This is the first use of this obverse die and third use of this reverse die.						
Date grid: M3.5, .028"	143 reeds		Typical diameter = 1.203"		Rarity - 3	
Drapery die state: Full Foot support		Full	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: MS62			Coin from the Randy V	Wiley Collection		
Cross reference: WB-101.					Version 82.S	



#### Obverse 4

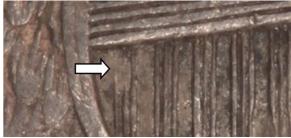


- Date left (photo)
- The small tine on the upper edge of the serif of the 1(845) seen on EDS of the previous use of this die (WB-5) is not visible on this die marriage.
- Clash in drapery below Liberty's elbow and in the field to the right of the drapery

### Reverse D



• Horizontal die line on the underside of the crossbar of the (AME)R(ICA) (photo). Note also the line in the dentils above the R.

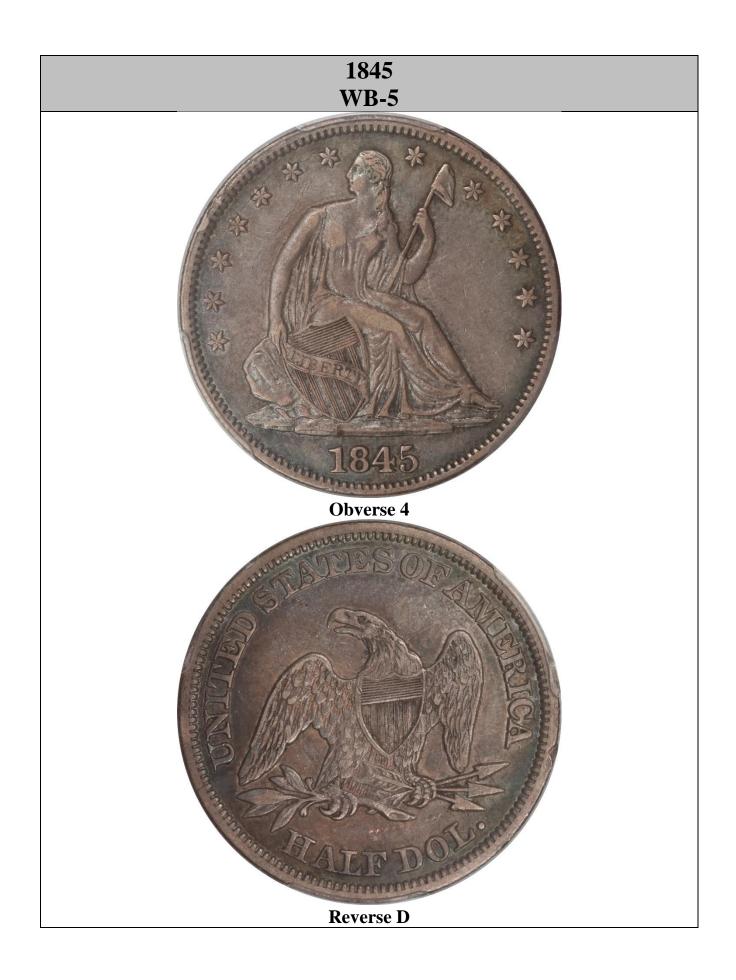


- Die layout centering "hole" in the top of vertical shield lines A-1-2 (photo)
- Clash in shield's lower right

This is the second use of this obverse die and only use of this reverse die.

Long thought to be a die state of WB-5, this new die marriage is a recent discovery and the rarity is an estimate. At least two others are known.

Date grid: M3, .028"	143 reeds	Typica	1  diameter = 1.203"	Rarity - 6
Drapery die state: Full		upport: Full	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PC	GS VF35	Coin from the Bill Bug	gert Collection	
Cross reference: WB-101.				Version 82.S



### 1846

With a large mintage, 1846 has plenty of die marriages and examples available for the collector. It also has two major date sizes, interesting varieties, and heavily cracked dies. Almost all dies have distinctive die diagnostics such that die marriage attribution is relatively simple.

Seventeen die marriages are known as depicted in the tables below.

Mintage	Number of Marriages	Obverse Dies	Reverse Dies	Reed Counts Known
2,210,000	Medium Date 9	9	8	2 (143, 145)
	Large (Tall) Date 8	6	7	2 (144, 145)

Medium versus Large (Tall) Date Sizes. Even with numerous references depicting both date sizes, the medium and large (tall) date sizes are still often confused. Besides the difference in the size of the digits, a readily identifiable characteristic of both, when side-by-side comparison is not possible, is the distance between the crossbar's serif and the base of the 4. On the medium date (upper photo at right), those touch while they are distant on the large (tall) date (lower photo at right).

Note. I use the terms "Large" and "Tall" interchangeably to represent the larger of the two date sizes for this date. The Tall Date descriptor has been used for many years but Large is used less often.

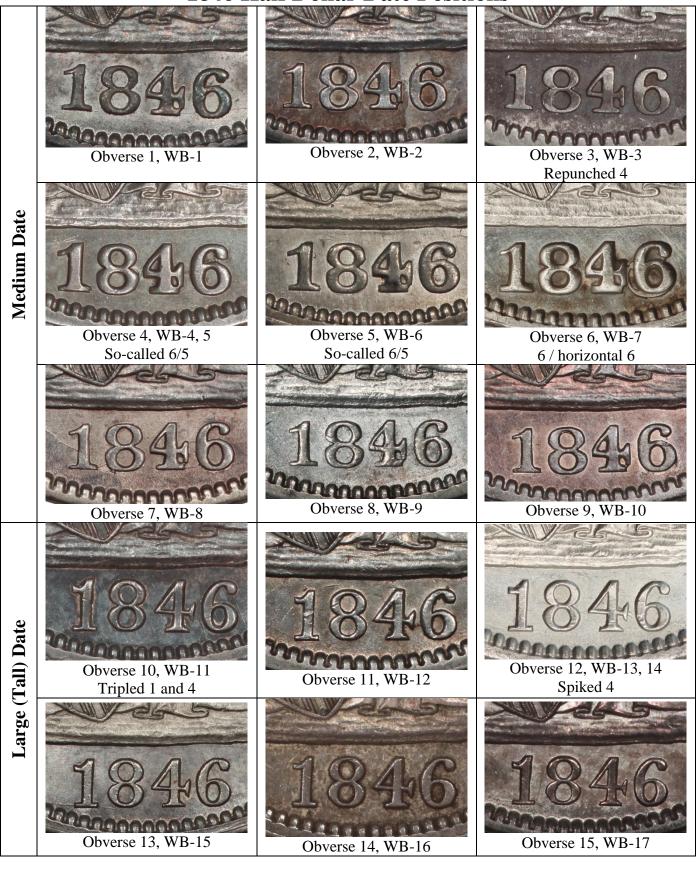


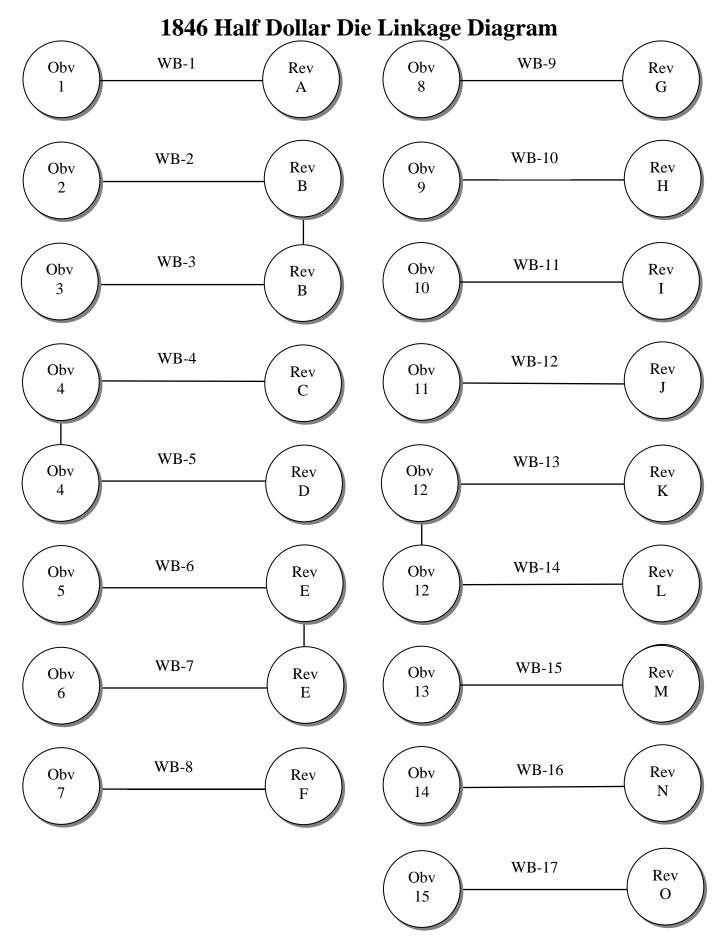


### 1846 date grid quick reference table

Obverse die date grid	Die Marriage
L5.5, .020"	WB-1
L5.5, .020"	WB-2
L5.5, .026"	WB-4
L5.5, .026"	WB-5
M1, .026"	WB-7
M1.5, .022"	WB-3
M1.5, .024"	WB-8
M2, .020"	WB-13
M2, .022"	WB-14
M2, .026"	WB-6
M2, .026"	WB-9
M2, .031"	WB-10
M2.5, .018"	WB-17
M2.5, .020"	WB-16
M3, .018"	WB-11
M3, .020"	WB-12
M3.5, .024"	WB-15

#### **1846 Half Dollar Date Positions**

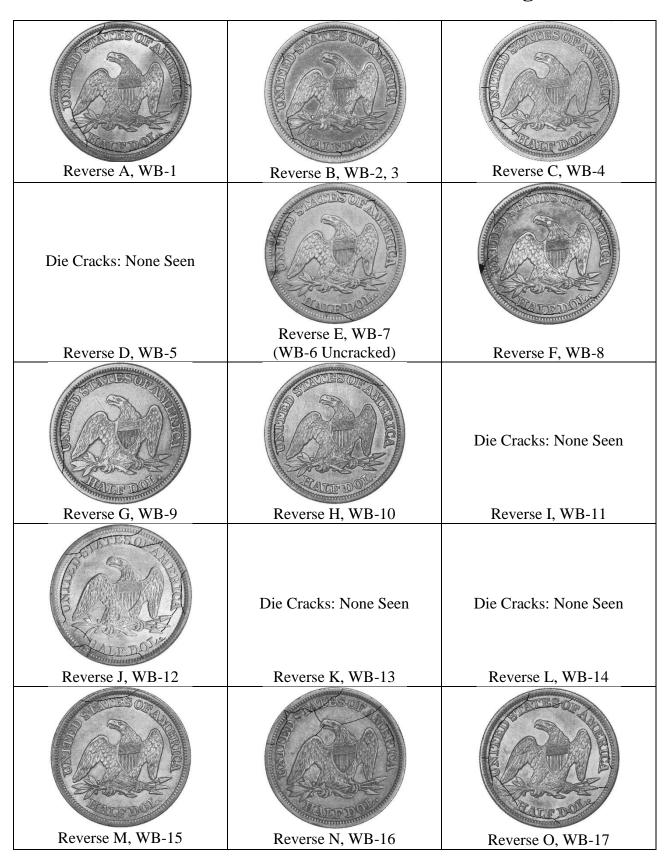




1846 Medium Da Obverse ar Reverse di identification keys	nd ie	No usable die diagnostics seen other than die cracks	No usable die diagnostics seen other than die cracks	Vertical die lines between olive leaf #3 and the eagle's left wing	Die lines above the letters (STA)TES	No usable die diagnostics seen other than die cracks	No usable die diagnostics seen other than die cracks	Diagonal die lines under the eagle' left wing	Several die lines between the top  of letters (UN)IT(ED) and the dentils
Date slants down to the right	1	WB-1							
Arcing die line thru Liberty's torso	2		WB-2						
Repunched 4	3		WB-3						
Errant 6 So-called 1846/5	4			WB-4	WB-5				
Errant 6 So-called 1846/5	5					WB-6			
6 / Horizontal 6	6					WB-7			
Die lines to the right of Liberty's head and star 8	7						WB-8		
Raised lump in the drapery	8							WB-9	
Doubled Die Obverse	9								WB-10

1846 Large Date Obverse an Reverse die identification keys	ıd e	Many lines, mostly horizontal, in the recessed areas between the olive leaves	No usable die diagnostics seen other than die cracks	Small elliptical shaped lump off the left foot of the (DO)L	Crumbling die thru UNITED STATES	Small lines between the top two arrow staffs	Small lump on the lower right leg	Diagonal die lines in the lower recessed area of the shield
Triple 1 & 4	10	<b>I</b> WB-11	J	K	L	M	N	О
Die lines to the right of the scroll end	11	WB 11	WB-12					
Spiked 4	12			WB-13	WB-14			
Very thick lines into Liberty's foot	13					WB-15		
Die line under Liberty's chin	14						WB-16	
Date slants down to the right (photo) with a small tine on the serif of the 1	15							WB-17

### 1846 Half Dollar Reverse Die Crack Diagrams



### 1846 WB-1, Medium Date

#### Obverse 1

Medium Date



• Medium Date slants down to the right (photo)



- LDS only: small cud in the dentils between stars 11-12 (photo)
- All examples seen: die cracks around the stars and along the base of the date (See enhanced die crack diagram on the next page.)

#### Reverse A

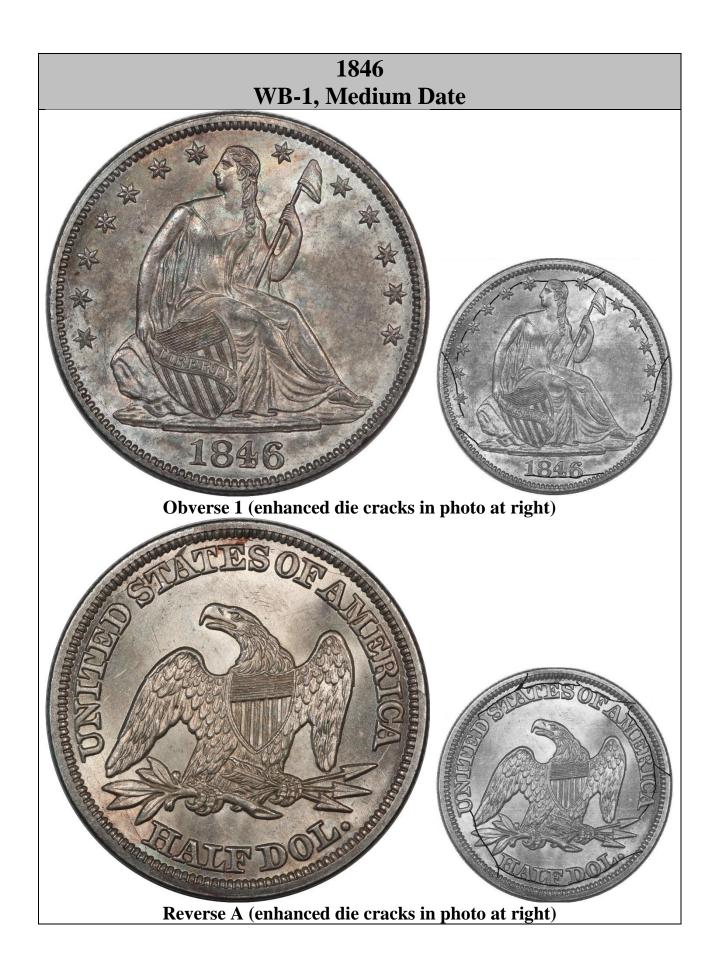
 No usable die diagnostics seen other than die cracks



- MDS-LDS only: small cud above the (ST)A(TES) (photo)
- All examples seen: die cracks thru the legend and denomination (See enhanced die crack diagram on the next page.)
- Unfinished die under the olive leaves

This is the only use of this obverse die and only use of this reverse die. One VLDS example seen has the reverse rotated 13° CCW.

one verse interest in the reverse in th								
Date grid: L5.5, .020" 1	143 reeds	Typica	1 diameter = 1.202"	Rarity - 3				
Drapery die state: Full	Foot support: Full	l D	Dentils: Obverse - Full; I	Reverse - Full				
Grade of coin depicted: EDS	- MS64	EDS coin from the Randy Wiley Collection						
LDS	S - XF45	LDS coin from the Bill Bugert Collection						
Cross reference: WR-101				Version 82 S				



### 1846 WB-2, Medium Date

# Obverse 2 Medium Date



Medium Date (photo)

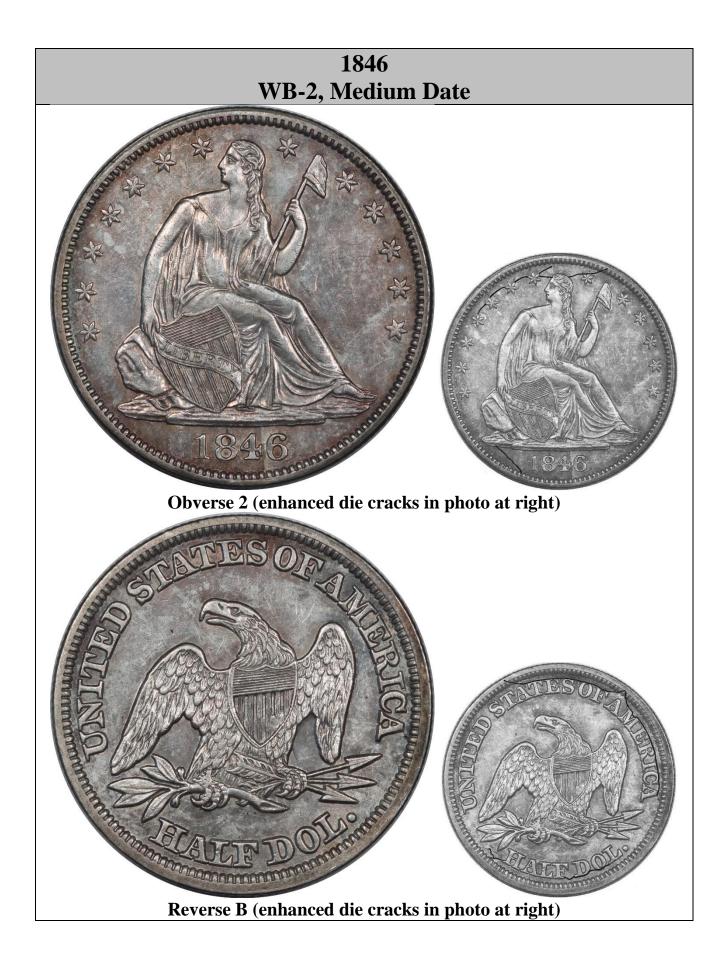


- Arcing, nearly horizontal, thick die line thru Liberty's torso (photo)
- Clash in the drapery below the Liberty's elbow and in the field to the right of the drapery
- All examples seen: faint die cracks (See enhanced die crack diagram on the next page.)

#### Reverse B

- No usable die diagnostics seen other than die cracks
- All examples seen: die cracks thru the legend (See enhanced die crack diagram on the next page.)
- Double and perhaps triple clash marks in the shield's lower right
- Unfinished die under the olive leaves

This is the only use of this obverse die and first use of this reverse die.							
Date grid: L5.5, .020" 143 reeds		Typical	diameter = 1.199"	Rarity - 3			
Drapery die state: Full Foot support:			Full	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: AU	J55			Coin from the Bill Bugert Collection			
Cross reference: WB-101. Version 82.5							



### 1846 WB-3, Medium Date, Repunched 4

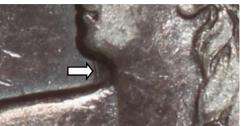
### Obverse 3

Medium Date



• Medium Date slants down to right (photo) with the center upright/serif of the (18)4(6) slightly repunched (photo below)





• Vertical line under Liberty's chin (photo)

#### **Reverse B**

- No usable die diagnostics seen other than die cracks
- All examples seen: die cracks thru the legend (See enhanced die crack diagram on the next page.)
- Triple and perhaps quadruple clash marks in the shield's right and under the eagle's right wing
- Unfinished die under the olive leaves

This is the only use of this obverse die and second use of this reverse die. All examples seen have a slightly ( $\sim$ 6° CW) rotated reverse.

Date grid: M1.5, .022"	143 reeds		Typical	diameter = 1.199"	Rarity - 4	
Drapery die state: Full Foot support:			Full	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: XF	740	Coin from the Bill Bugert Collection				
Cross reference: WB-Unlisted.					Version 82.S	



#### 1846

### WB-4, Medium Date, Errant 6, So-called 1846/5

#### **Obverse 4**

Medium Date



Medium Date (photo) with jumbled logotype remnants and possibly an errant 6 between the digits (18)46 (photo below). See note below.

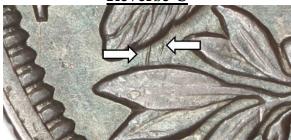




Overlay at left: rendition of how the initial 6 may have been punched into the working die. Note how the remnants match the errant 6.

Many horizontal die lines in Liberty's gown to the right of the scroll. See photo at WB-5.

**Reverse C** 



Vertical die lines between olive leaf #3 and the eagle's left wing (photo)



- Scattered die lines in the lower recessed area of the shield (photo)
- All examples seen: die cracks thru the legend and denomination (See enhanced die crack diagram on the next page.)
- Clash in shield's lower right

This is the first use of this obverse die and only use of this reverse die.

This is one of the so-called 1846/5 overdates. More likely, it is a repunched 6 with remnants of an unfinished logotype punch in and around the last two digits of the date.

Date grid: L5.5, .026"	145 r	eeds	Typical	diameter = 1.207"	Rarity - 3	
Drapery die state: Full Foot support:			Full	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU	J <b>5</b> 3		Coin from the Randy Wiley Collection			
Cross reference: WB-102.					Version 82.S	



#### 1846

#### WB-5, Medium Date, Errant 6, So-called 1846/5

#### **Obverse 4**

Medium Date



 Medium Date (photo) with jumbled logotype remnants and possibly an errant 6 between the digits (18)46, now much weaker than on the previous use of this die (WB-4) (photo below). See note below.





 Many horizontal die lines in Liberty's gown to the right of the scroll (photo) Reverse D



• Die layout centering "hole" in the top of vertical shield lines A-1-2 (photo)



• Die lines above the letters (STA)TES (photo). Others above AM(ERICA) and off the lower left foot of the H(ALF) (photo below).

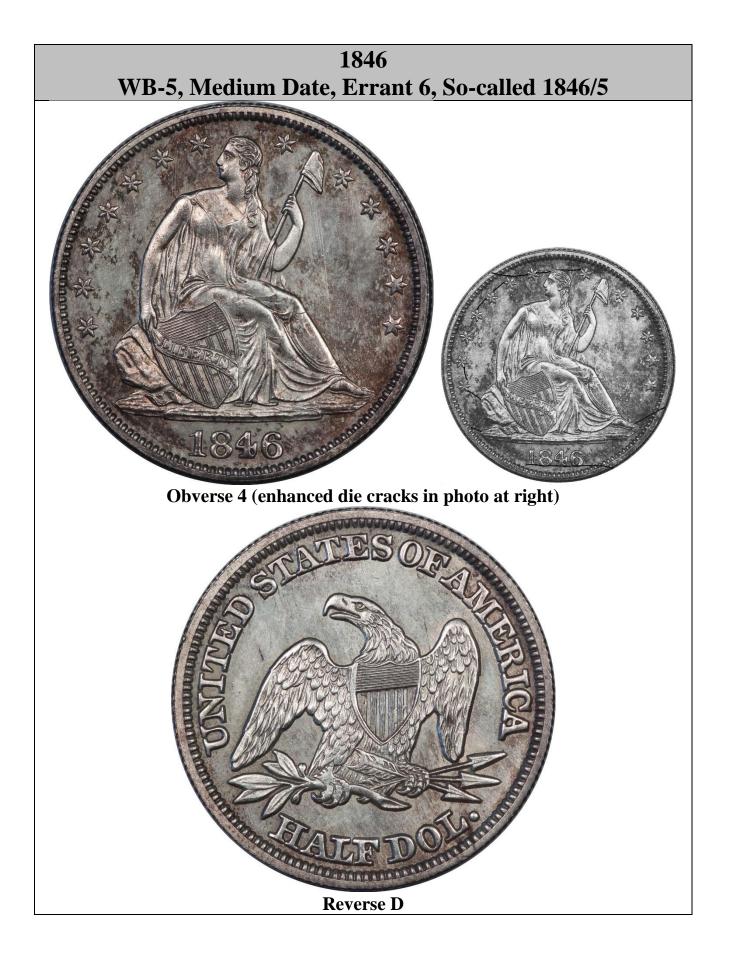


- Clash in shield's lower right
- This reverse die is transitional with 1847 (reverse H).

This is the second use of this obverse die and only use of this reverse die.

This is one of the so-called 1846/5 overdates. More likely, it is a repunched 6 with remnants of an unfinished logotype punch in and around the last two digits of the date.

2 71 1				8		
Date grid: L5.5, .026"	145 reeds		Typical	diameter = 1.197"	Rarity - 3	
Drapery die state: Partial Foot support: Fu			Full	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS	S63	Coin from the Bill Bugert Collection				
Cross reference: WB-102.				Version 82.S		



#### 1846

### WB-6, Medium Date, Repunched 8, So-called 1846/5

#### Obverse 5

Medium Date



• Medium Date (photo) with the (1)8(4)6 repunched north and die "defect" in the lower loop of the 6 often mistaken for an overdate (photo below)





- LDS only: rim cud into dentils at K-7 (photo)
- Tiny rust lumps on Liberty

This is the only use of this obverse die and first use of this reverse die.

This is one of the so-called 1846/5 overdates. More likely, it is a repunched 6 with remnants of an unfinished logotype punch in and around the last two digits of the date.

Date grid: M2, .022"	145 re	eeds	Typical	l diameter = 1.204"	Rarity - 4	
Drapery die state: Partial	Orapery die state: Partial Foot support: 1			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: ED	S - AU	J <b>5</b> 8	Coins from the Randy Wiley Collection			
LI	OS - XI	F45	Coms from the Kandy	whey Conection		
Cross reference: WB-103.			Version 82.S			

#### **Reverse** E



- Die lines above and thru (AM)ERICA, heaviest between the bases of (AM)ER(ICA) (photo). Other weaker lines above UNIT(ED).
- Unfinished beneath olive leaves



#### 1846

### WB-7, Medium Date, 6/Horizontal 6

#### Obverse 6

Medium Date



• Medium Date with the 6 punched over a single "6" rotated 90° CCW (photos above and below). Note the raised unfinished area between the digits (1)846 and the die defect in the lower loop of the 6 similar to that seen on WB-6. This horizontal 6 proves the use of a single digit logotype punch.





- MDS-LDS (most examples): double rim cud below the date (photo)
- LDS: die crack thru and the stars (See enhanced die crack diagram on the next page.)

#### Reverse E

- The die lines above and thru (AM)ERICA, heaviest between the bases of (AM)ER(ICA) seen on the previous use of this die (WB-6) are now very weak.
- Unfinished beneath olive leaves
- EDS: weak die cracks starting along the base of HALF
- LDS: extensive cracks thru the legend and denomination (See enhanced die crack diagram on the next page.)



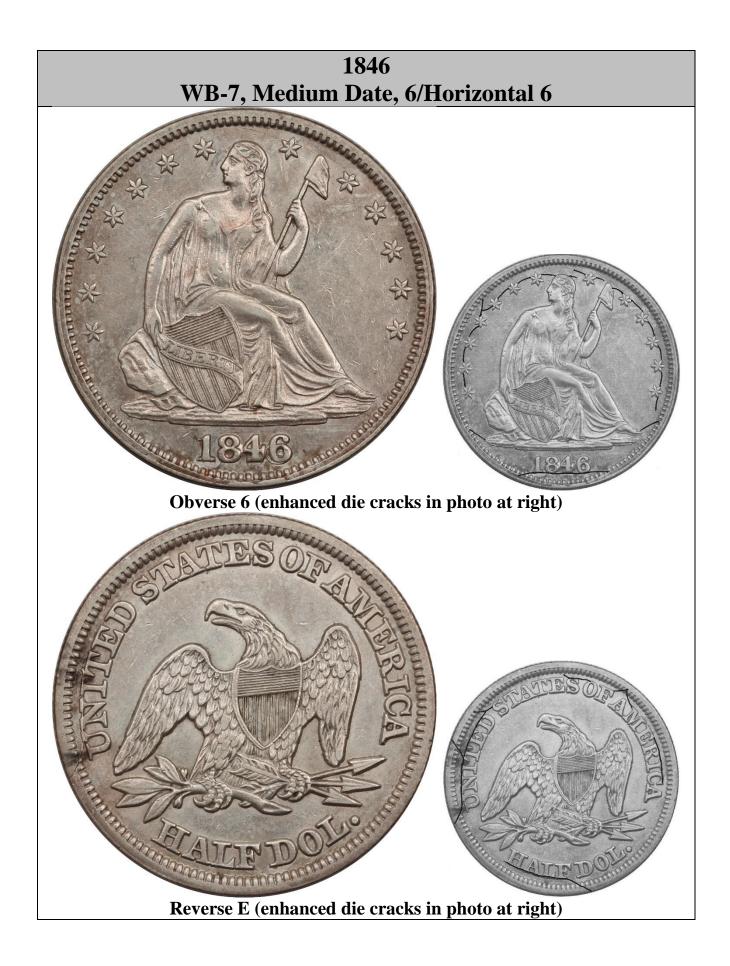
 VLDS: retained cud above UNIT(ED) (photo above) that <u>appears</u> to be a full cud on low grade examples (photo below)



This is	the	only	use	of this	obv	erse	die	and	secon	d us	e of	f tl	nis	reverse	e di	e.
D .	• 1	3 (1	00	C 2 2	- 1	4 ~	-1				•	1	1.	-	-1	20

Date grid: M1, .026"	145 r	eeds	Typical	diameter = 1.204"	Rarity - 3		
Drapery die state: Full Foot support: I				Dentils: Obverse - Ful	ll; Reverse - Full		
Grade of coin depicted: EDS	S - M	S63	EDS	EDS coin from the Randy Wiley Collection			
VLDS	S - AU	U53, G6	LDS	LDS coins from the Bill Bugert Collection			
Cross reference, WD 104					Vancian 92 C		

Cross reference: WB-104. Version 82.S



### 1846 WB-8, Medium Date

### Obverse 7

Medium Date



Medium Date (photo)



- All examples seen: nearly vertical die lines to the right of Liberty's head and star 8 (photo)
- All examples seen: at least some die cracks, starting to the left of the date. Later die states are cracked thru the stars. (See enhanced die crack diagram on the next page.)

#### **Reverse F**

 All examples seen: at least some die cracks thru legend (See enhanced die crack diagram on the next page.)



• LDS only: rim cud that extends into the dentils at K-9 (photo)

This is the only use of this obverse die and only use of this reverse die.								
Date grid: M1.5, .024" 145 reeds			Typical	Rarity - 3				
Drapery die state: Full Foot supp			Full	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: AU	J <b>5</b> 5	Coin from the Randy Wiley Collection						
Cross reference: WB-101.	•			Version 82.S				



### 1846 WB-9, Medium Date

#### Obverse 8

Medium Date



• Medium Date slants slightly up to the right (photo)

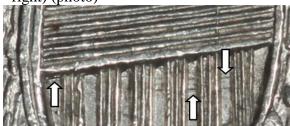


- Raised lump in the drapery below Liberty's elbow next to the pole (photo) visible on higher grade coins only
- See enhanced die crack diagram on the next page.

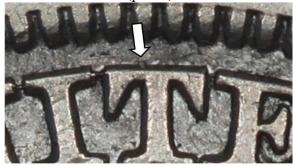
Reverse G



• Diagonal die lines under the eagle' left wing (above left) and the left outside shield line extends into the eagle's feathers (above lower right) (photo)



 Horizontal die lines in the lower recessed area of the shield (photo)



- Small lump on the upper edge of the (UNI)T(ED) (photo)
- All examples seen have at least some die cracks thru the legend. (See enhanced die crack diagram on the next page.)
- Clash in shield's lower right



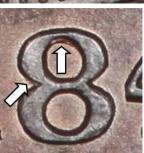
### 1846 WB-10, Medium Date, Doubled Die Obverse

#### Obverse 9

Medium Date



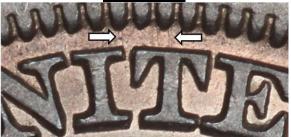
 Medium Date low (photo) with the 8 repunched north (photo at right)



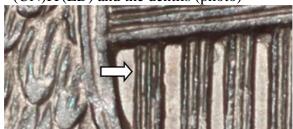


• Doubled die with stars 1-5 (1-2 shown), rock, rock support, and shield lines doubled (photo)

Reverse H



 Several die lines between the top of letters (UN)IT(ED) and the dentils (photo)



- Repaired vertical shield lines A-1 thru A-3 (photo)
- All examples seen have at least some die cracks thru the legend. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.

Date grid: M2, .031"	145 reeds		Typical	diameter = 1.200"	Rarity - 3
Drapery die state: Full	Foot support:	Full	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU50				Coin from the Bill Bug	gert Collection
Cross reference: WB-105.					Version 82.S



### 1846 WB-11, Large Date Tripled 1 & 4

#### Obverse 10 Large (Tall) Date



• Large Date slanting down to the right (photo) with the bases of the 1 & 4 triple punched east (photos below). This tripling will likely not show on very low grade coins.

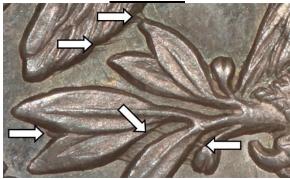






• Possible digits in the dentils below the (1)846 (photo)

### Reverse I



Many lines, mostly horizontal, in the recessed areas between the olive leaves (photo). Other less prominent lines in the arrowheads, in the shield's lower right, and around the circumference of the die by the dentils

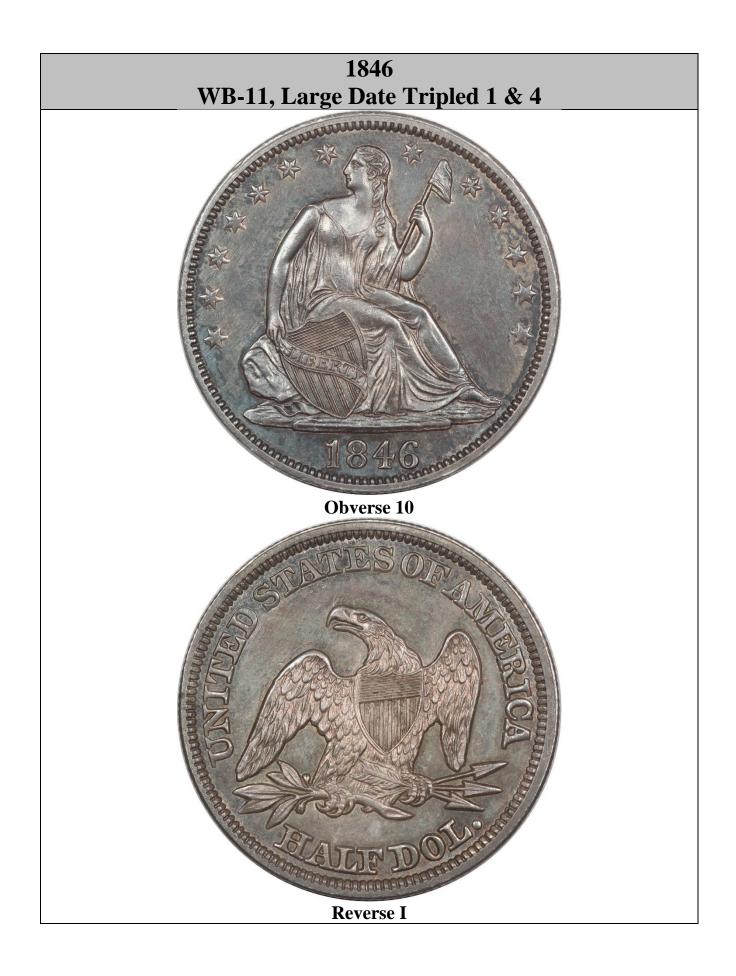


• Die line closes the upper loop of the (STATE)S (photo)

This is the only use of this obverse die and only use of this reverse die.

Proof 1846 Large Date half dollars were also struck using these dies.

Date grid: M3, .018"	145 weak reeds		Typical diameter = 1.205"		Rarity - 3
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: MS	S63		Coin from the Randy V	Wiley Collection	
Cross reference: WB-107.					Version 82.S



## 1846 WB-12, Large Date

#### Obverse 11

Large (Tall) Date



Large Date (photo) with the 8 repunched slightly south on EDS-MDS coins (photo at right)



- (See enhanced die crack diagram on the next page.)

#### **Reverse J**

- No usable die diagnostics seen other than die cracks
- All examples seen: at least some die cracks (See enhanced die crack diagram on the next page.)

•	Horizontal die lines and a small lump in
	Liberty's gown to the right of the scroll end
	(photo)
•	MDS-LDS: extensive die cracks thru the sta

This is the only use of this obverse die and only use of this reverse die.							
Date grid: M3, .020"	145 re	eeds	Typica	l diameter	= 1.202"	Rarity - 3	
Drapery die state: Full Foot support: Fu			Full	l Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: MDS - XF40 MDS coin from the Bill Bugert Collection							
LDS - MS60				LDS coin from the Randy Wiley Collection			
Cross reference: WB-106 and <i>Gobrecht Journal</i> #62, 3/1995. Version 82.S							



### 1846 WB-13, Large Date, Spiked 4

### Obverse 12

Large (Tall) Date



Large Date (photo)
 with heavy wedge
 shaped tine
 diagonally thru the
 4's serif, so nicknamed the
 "spiked 4" (photo
 at right)





- Die lines in the crotch formed by the rock and rock support; another along the lower outside left edge of the shield (photo). Other lines in the center recessed area of the rock and along the outside shield edge below Liberty's index finger.
- MDS-LDS: several die cracks. (See enhanced die crack diagram on the next page.)





 Small elliptical shaped lump off the left foot of the (DO)L (photo)



• EDS-MDS only: tiny lines from the dentils above (U)NIT(ED) (photo); others diagonally thru (A)M(ERICA) (photo below)



This is the first use of this obverse die and only use of this reverse die.

Date grid: M2, .020"	145 reeds		Typical	diameter = 1.204"	Rarity - 3
Drapery die state: Full Foot support		Foot support:	Full	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: MS61 and AU53				Coins from the Randy	Wiley Collection
Cross reference: WB-108.					Version 82.S



#### 1846

### WB-14, Large Date, Spiked 4, Crumbling Reverse Die

#### **Obverse 12**

Large (Tall) Date



Large Date

 (photo) with
 heavy wedge
 shaped tine
 diagonally thru
 the 4's serif, sonicknamed the
 "spiked 4." Now



much weaker spiked 4 than on the previous use of this die (WB-13) (photo above).



- Die lines in the crotch formed by the rock and rock support; another along the lower outside left edge of the shield (photo). Other lines in the center recessed area of the rock and along the outside shield edge below Liberty's index finger.
- Since this die cracked on its previous use (WB-13), all examples of this die marriage will have a cracked obverse. (See enhanced die crack diagram on the next page.)

#### Reverse L



Crumbling die thru UNITED STATES
 (STATE shown in above photo), UNITE(D)
 (shown in the photo below), and on the
 eagle's head

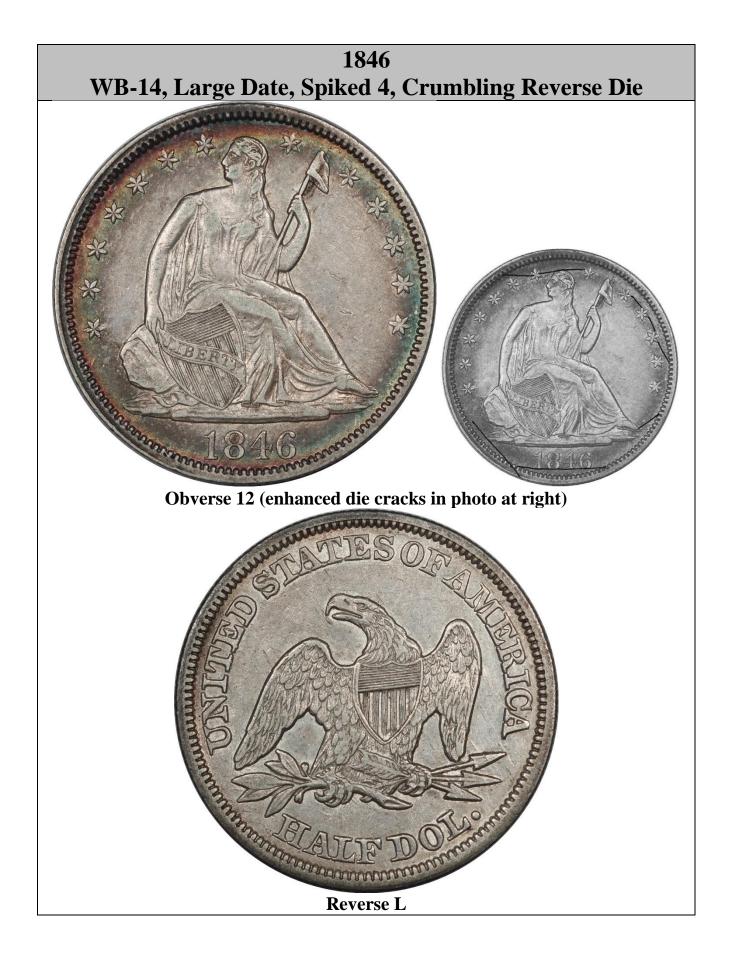




 LDS: little of the crumbling (shown far above) can be seen. The legend's letters appear weak and worn possibly from attempts at the Mint to remove the crumbling (photo).

This is the second use of this obverse die and only use of this reverse die.

Date grid: M2, .022"	145 reeds		Typical diameter = 1.203"		Rarity - 3
Drapery die state: Full		Foot support:	Full	Dentils: Obverse - Full; Reverse - Full	
Grade of coins depicted: XF45 (2)				Coins from the Bill Bu	gert Collection
Cross reference: WB-108.					Version 82.S



### 1846 WB-15, Large Date

### Obverse 13

Large (Tall) Date



Large Date

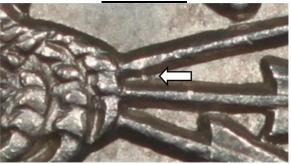
 (photo) with a
 small tine to the
 upper left of the
 serif of the 1
 (photo at right)





- Very thick lines from rock support into Liberty's foot (photo)
- EDS: uncracked
- MDS-LDS: See enhanced die crack diagram on the next page.

#### Reverse M

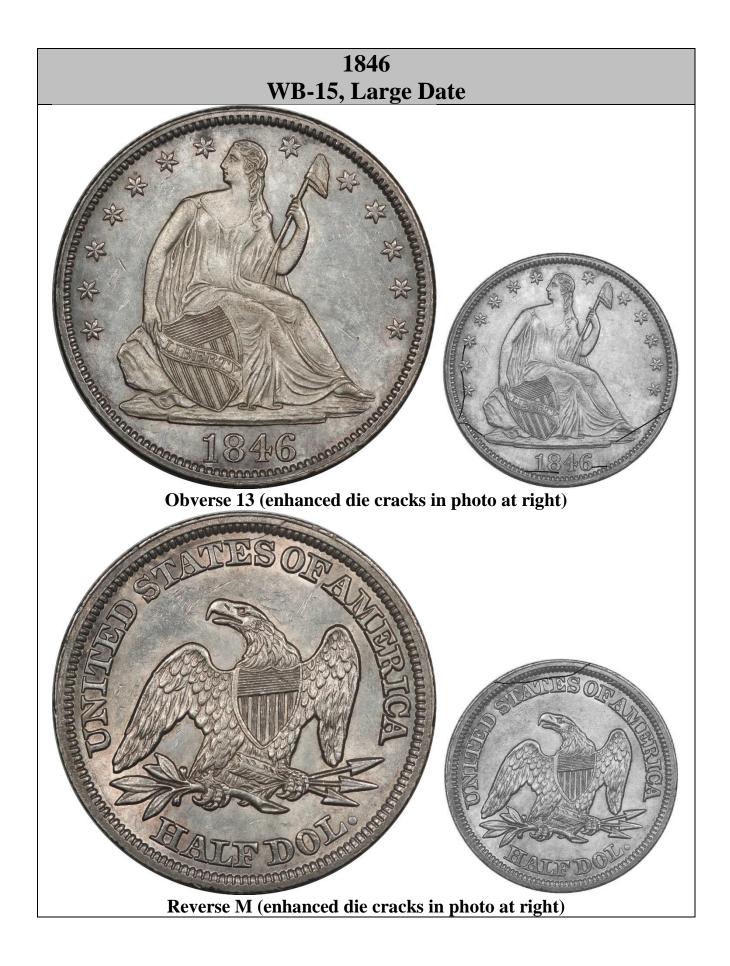


- Small lines between the top two arrow staffs (photo)
- EDS: uncracked



• LDS: distinctive arcing die crack above (ST)ATES (photo). (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.							
Date grid: M3.5, .024" 145 reeds Typical diameter = 1.206" Rarity -							
Drapery die state: Full Foot support: W		Weak	Dentils: Obverse - Full; Reverse - Full				
				Coin from the Randy V	Wiley Collection		
Cross reference: WB-106.					Version 82.S		



### 1846 WB-16, Large Date

# Obverse 14 Large (Tall) Date



Large Date
 (photo) with small
 tine on the upper
 left serif of the 1
 (photo at right)





 Large lump in Liberty's gown under her left knee (photo)



- Die line under Liberty's chin (photo)
- LDS: radial die crack at K-9 (See enhanced die crack diagram on the next page.)





- Small lump on the lower right leg of the (AMERIC)A (photo)
- LDS: distinctive die cracks converging on the eagle's head. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.

Date grid: M2.5, .020"	144 r	eeds	Typical	diameter = 1.201"	Rarity - 3
Drapery die state: Full Fo		Foot support:	Full	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF45				Coin from the Bill Bug	gert Collection
Cross reference: WB-106.					Version 82.S



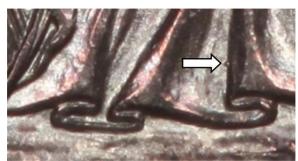
# 1846 WB-17, Large Date

#### Obverse 15

Large (Tall) Date

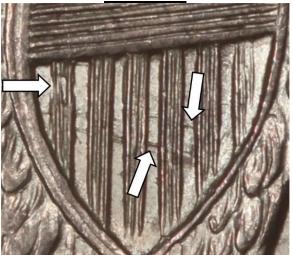
 Large Date slants down to the right (photo) with a small tine on the serif of the 1 (photo at right)





- Small lump on Liberty's gown above the hemline (photo)
- All examples seen: at least some die cracks prominently along the base of the digits of the date. (See enhanced die crack diagram on the next page.)

#### Reverse O



- Die layout centering "hole" in the top of vertical shield lines A-1-2 and diagonal die lines in the lower recessed area of the shield (photo)
- All examples seen: at least some die cracks.
   (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.								
Date grid: M2.5, .018"	144 reeds		Typical	diameter = 1.203"	Rarity - 3			
Drapery die state: Full	Foot support: Full Dentils: Obverse - Full; Reverse - Full			ll; Reverse - Full				
1 7					Wiley Collection			
Cross reference: WB-106.					Version 82.S			



#### 1847

1847 is a very popular date among collectors hoping to cherry pick an overdate. With the very rare overdate/doubled die obverse combination and other repunched dates, there are plenty of other die marriages to interest and challenge the collector. Many dies have at least a few die lines and defects, and, in later die states with die cracks, most of the die marriages are very easy to properly attribute.

Thirteen die marriages are known as depicted in the tables below.

Mintage	Number of	Obverse	Reverse	Reed Counts
	Die Marriages	Dies	Dies	Known
1,156,000	13	8	9	2 (144, 145)

Early die state 1847 half dollars, especially those without die cracks, can be very difficult to properly attribute. For these, the date position is extremely helpful and the following table is useful.

1847 date grid quick reference table

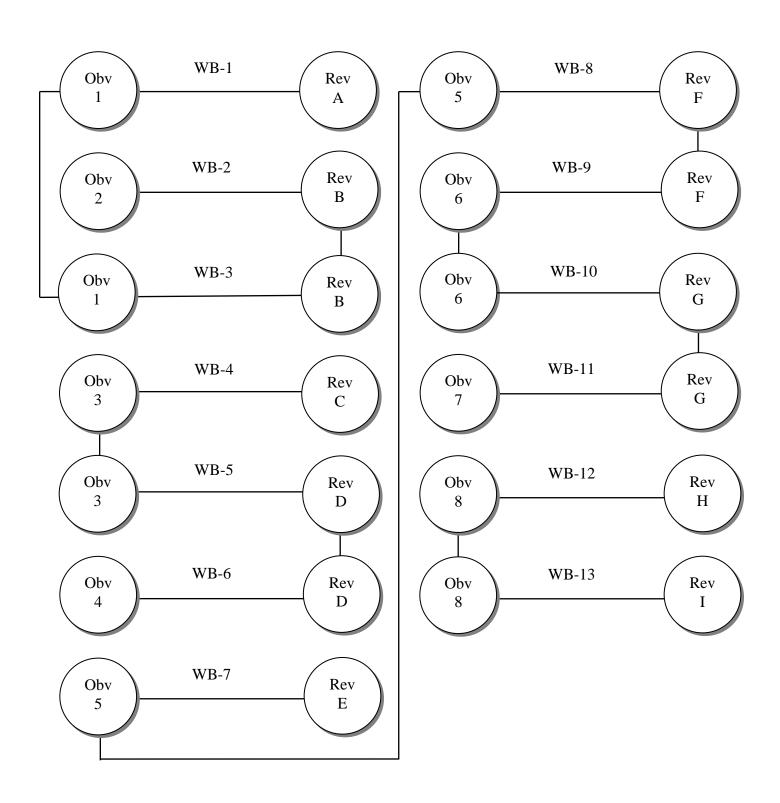
<u> </u>	
Obverse die date grid	Die Marriage
L5, .016"	WB-6
L5, .016"	WB-7
L5, .017"	WB-8
L5.5, .010"	WB-1
L5.5, .012"	WB-3
L5.5, .014"	WB-4
L5.5, .016"	WB-5
L5.5, .024"	WB-12
L5.7, .026"	WB-13
M1, .016"	WB-11
M1, .022"	WB-2
M3, .008"	WB-10
M3, .008"	WB-9

### **1847 Half Dollar Date Positions**



1847 Obverse an Reverse d identificati keys	ie	Prominent diagonal (NW to SE) die line in the reverse shield	Vertical pointed die lines from the eagles' neck and left wing	No usable die diagnostics seen other than MDS-LDS die cracks	Many die lines in the field above the letters (U)NITED	Nearly horizontal die line in the lower shield	Slanted line to the left of vertical shield line B1	νυmerous die lines between the dentils and letters (ST)ATE(S)	H Die layout centering "hole" in the top of vertical shield lines A1-2	Vertical die line, perhaps the extended vertical shield line A3, from the shield into the eagle's neck
No usable die diagnostics seen	1	WB-1	WB-3							
7 Repunched North	2		WB-2							
Attribution difficult – see die marriages	3			WB-4	WB-5					
Repunched 47	4				WB-6					
Small lump in the rock support below Liberty's toes	5					WB-7	WB-8			
1847/1846	6						WB-9	WB-10		
Numerous die lines from the dentils	7							WB-11		
Date low slanting slightly up to right	8								WB-12	WB-13

# 1847 Half Dollar Die Linkage Diagram



**Obverse 1** 

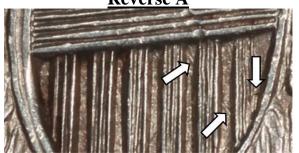


• Date (photo)



- EDS-MDS only: rim cud below date (photo)
- Unfinished under Liberty's chin
- No usable die diagnostics seen other than MDS-LDS die cracks. (See enhanced die crack diagram on the next page.)



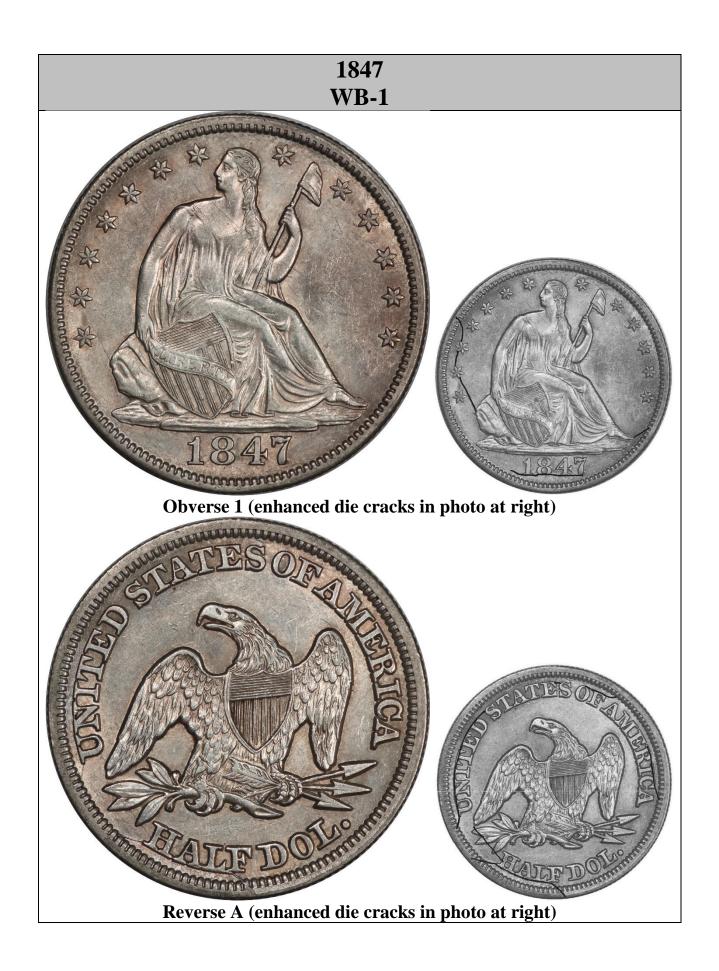


- Prominent diagonal (NW to SE) die line in the reverse shield; another horizontal short line by vertical shield line F3 (photo)
- MDS-LDS: die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)



• VLDS: retained cud along the base of HAL(F) to adjacent dentils (photo); in a later die state, this reverse may have a full cud. If so, it is likely very rare.

This is the first use of this obverse die and only use of this reverse die.								
Date grid: L5.5, .010" 144 reeds T		Тур	Typical diameter = 1.204" Rarity -					
Drapery die state: Full	Foot support: Full				Dentils: Obverse - Fu	ll; Reverse - Full		
Grade of coin depicted: EI	DS -	PCGS AU50		EDS c	oin from the Bill Buger	rt Collection		
LDS - AU53			]	LDS coin from the Randy Wiley Collection				
Cross reference: WB-101.					Version 82.S			



# 1847 WB-2, 7 Repunched North

Obverse 2

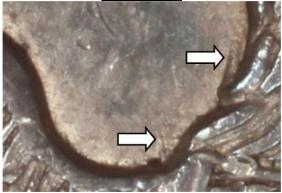


• Date (photo) with the (184)7 repunched north; doubling shows at the lower left upright of the 7 (photo below).

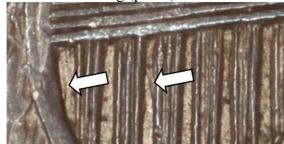


• Die cracks around most of the stars and along the base of the date (See enhanced die crack diagram on the next page.)

Reverse B



Vertical pointed die lines from the eagles' neck and left wing (photo)



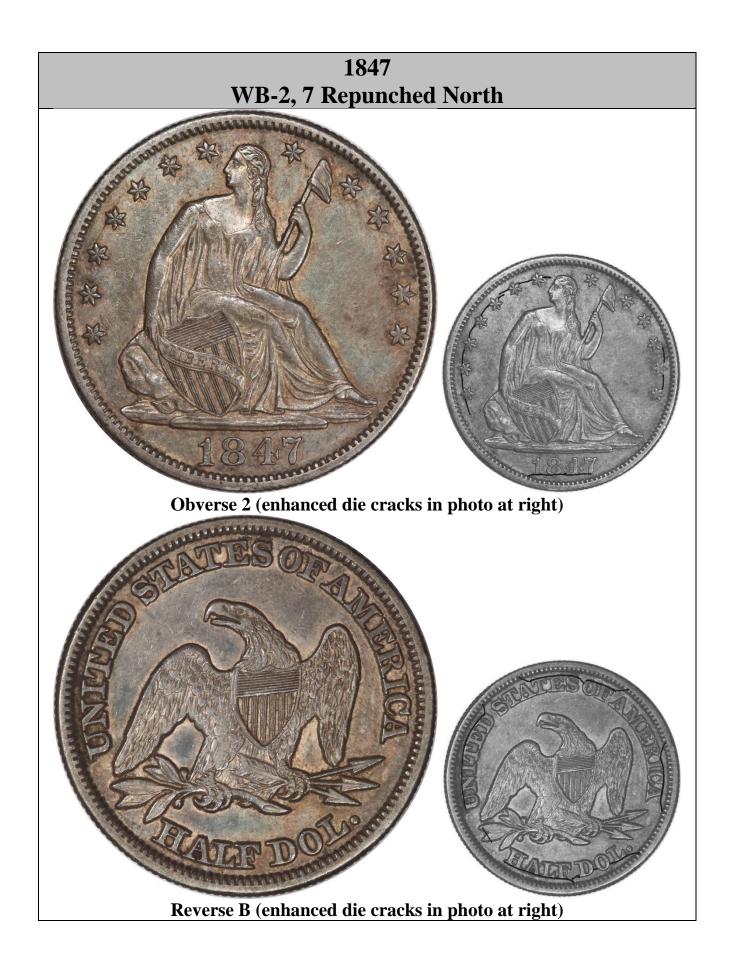
• Die lines in the lower shield (photo)



- Small die lines from the underside of the eagle's right wing and leg (photo)
- Die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and first use of this reverse die.

Date grid: M1, .022"	M1, .022" 144 reeds		Typical di	ameter = 1.200"	Rarity - 3
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PCGS AU50				Coin from the Bill Bu	gert Collection
Cross reference: WB-103.					Version 82.S

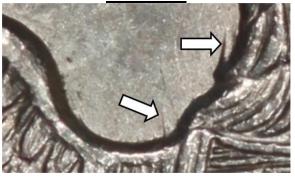


Obverse 1

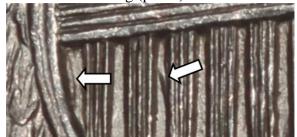


- Date (photo)
- Unfinished under Liberty's chin
- No usable die diagnostics seen other than MDS-LDS die cracks. (See enhanced die crack diagram on the next page.)

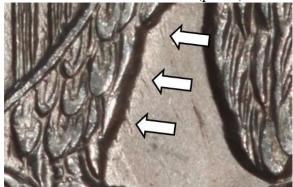
Reverse B



 Vertical pointed die lines from the eagles' neck and left wing (photo)

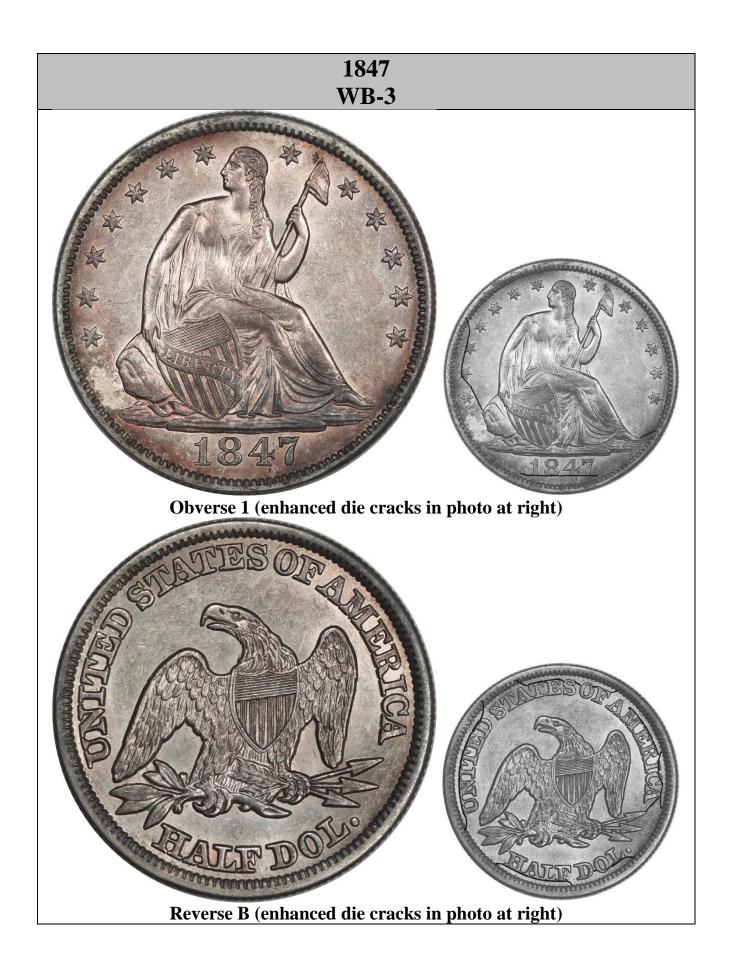


• Die lines in the lower shield (photo)



- Small die lines from the underside of the eagle's right wing and leg (photo)
- Die cracks thru legend and denomination.
   (See enhanced die crack diagram on the next page.)

This is the second use of this obverse die and second use of this reverse die.								
Date grid: L5.5, .012"	144 reeds		Typical diameter = 1.204"		Rarity - 3			
Drapery die state: Full	Foot support: Full		ull	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: A	epicted: AU53			Coin from the Randy	Wiley Collection			
Cross reference: WB-101.					Version 82.S			



#### Obverse 3



• Date (photo) with a small time by the right side of the upright of the 1(847), opposite the serif (photo below)





- EDS only: die lines between the right end of the rock support and the dentils (photo). All die states: two short die lines from Liberty's heel into the rock support (photo above).
- EDS: uncracked; MDS-LDS: die cracks thru many stars and along the base of the data. (See enhanced die crack diagram on the next page.)

#### **Reverse C**

- No usable die diagnostics seen other than MDS-LDS die cracks (See enhanced die crack diagram on the next page.)
- Die cracks thru legend, denomination, and bisecting the reverse. (See enhanced die crack diagram on the next page.)

This is the first use of this obverse die and only use of this reverse die.

Date grid: L5.5, .014"	144 reeds		Typical di	ameter = 1.201"	Rarity - 3
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: El		- AU58 - VF35		Coins from the Bill B	ugert Collection
Cross reference: WB-101.				Version 82.S	



Obverse 3



• Date (photo). The tine on the 1 seen in the previous use of this die (WB-4) is not now visible.



- Two short die lines from Liberty's heel into the rock support (photo)
- All die states: die cracks thru many stars and along the base of the data. (See enhanced die crack diagram on the next page.)

Reverse D



 Many die lines in the field above the letters (U)NITED (photo)





Vertical die gouge thru the upper serif of the (O)F and another thru the crossbar of the (AMERIC)A (photos above)



• Die lines from the eagle's neck and upper left wing (photo)



• Small tines from the lower edge of the olive stem and feather tip (photo)

This is the second use of this obverse die and first use of this reverse die.							
Date grid: L5.5, .016"	144 reeds		Typical diameter = 1.200"		Rarity - 3		
Drapery die state: Full	pery die state: Full Foot support: F		full	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: VF35				Coin from the Bill Bu	gert Collection		
Cross reference: WB-101.					Version 82.S		



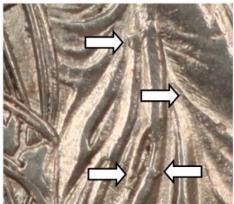
# 1847 WB-6, Repunched 47

Obverse 4



Date (photo) with the (18)47 noticeably repunched north; doubling shows along the bottom of the crossbar of the 4 and the entire 7 (photo below)



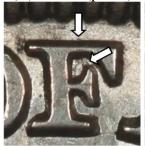


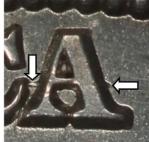
Lumps and die lines in Liberty's gown to the right of the shield (photo)





Many die lines in the field above the letters (U)NITED (photo)





- Vertical die gouge thru the upper serif of the (O)F and another thru the crossbar of the (AMERIC)A (photos above)
- The die lines from the eagle's neck and upper left wing seen on the previous use of this die (WB-5) are not now visible.



- Small tines from the lower edge of the olive stem and feather tip (photo)
- Die cracks thru legend, denomination, and bisecting the reverse. (See enhanced die crack diagram on the next page.)

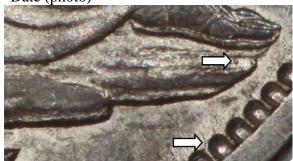
This is the only use of this obverse die and second use of this reverse die.							
Date grid: L5, .016"	144 reeds		Typical diameter = 1.205"		Rarity - 3		
Drapery die state: Full	Foot support: Fu		ull	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: A	Grade of coin depicted: AU58			Coin from the Randy	Wiley Collection		
Cross reference: WB-104.					Version 82.S		



Obverse 5



Date (photo)



- Small lump in the rock support below Liberty's toes and a short die line from the dentil below the rock support (photo)
- LDS: die cracks thru most of the stars, along the base of the date, and below the rock support. (See enhanced die crack diagram on the next page.)

Reverse E



- All die states: nearly horizontal die line in the lower shield (photo); EDS examples have scattered weak die lines below this line.
- Die cracks thru legend, denomination, and bisecting the reverse (See enhanced die crack diagram on the next page.)
- Note: the die cracks on this reverse die have a pattern very similar to the die cracks on the different reverse die used on the next die marriage (WB-8). Use care when attributing WB-7 and WB-8 as the obverse die is the same while the reverse has very similar die cracks.

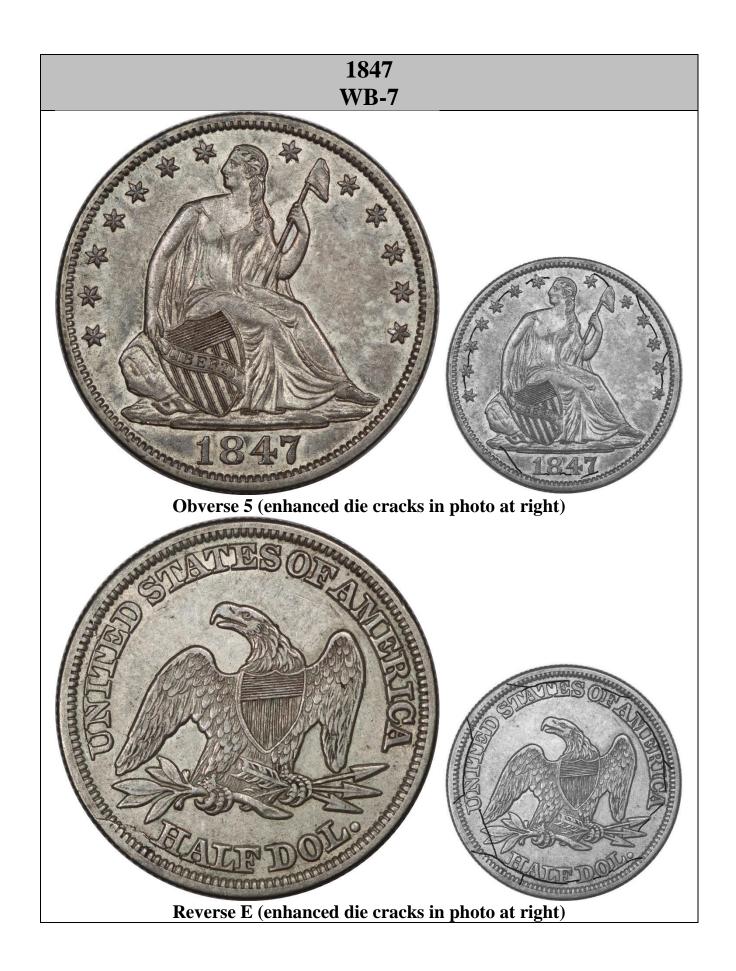
This is the first use of this obverse die and only use of this reverse die.

Date grid: L5, .016" 144 reeds Typical diameter = 1.202" Rarity - 3

Drapery die state: Full Foot support: Full Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: PCGS AU50 Coin from the Bill Bugert Collection

Cross reference: WB-101.



Obverse 5



Date (photo)



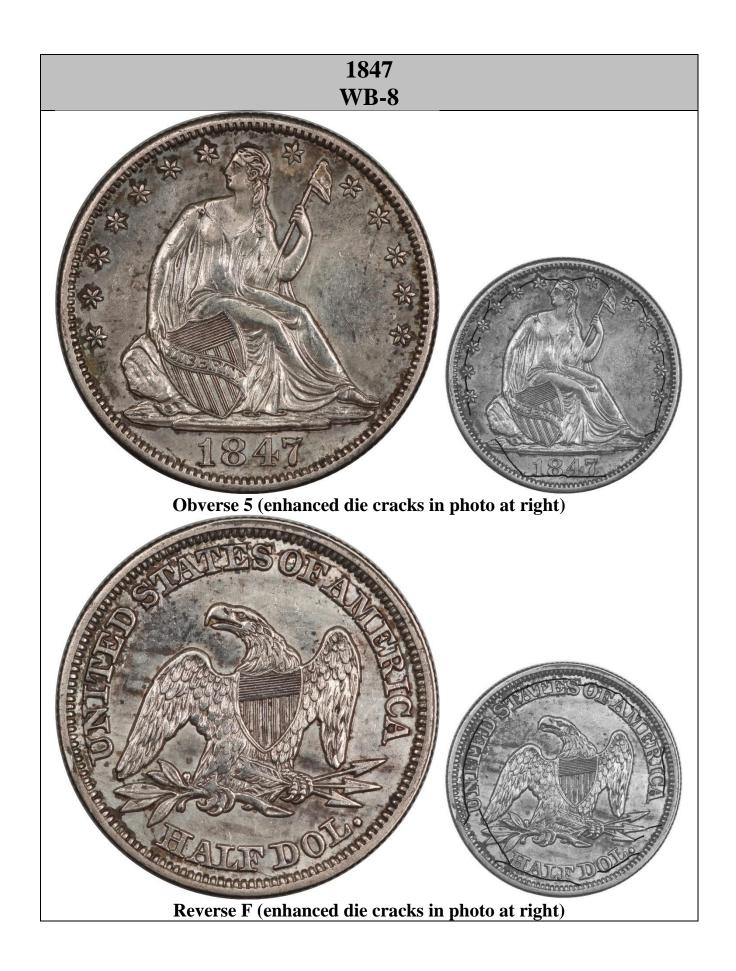
- Small lump in the rock support below Liberty's toes and a short die line from the dentil below the rock support (photo)
- All die states: die cracks thru most of the stars, along the base of the date, and below the rock support (See enhanced die crack diagram on the next page.)

Reverse F



- Slanted line to the left of vertical shield line B-1 (photo)
- Die cracks thru legend and denomination (See enhanced die crack diagram on the next page.)
- Note: the die cracks on this reverse die have a pattern very similar to the die cracks on the different reverse die used on the previous die marriage (WB-7). Use care when attributing WB-7 and WB-8 as the obverse die is the same while the reverses have very similar die cracks.

This is the second use of this obverse die and first use of this reverse die.							
Date grid: L5, .017"	14	44 reeds Typical		ameter = 1.205"	Rarity - 4		
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: A	U55	144 reeds Typical Foot support: Full		Coin from the Randy Wiley Collection			
Cross reference: WB-101					Version 82.S		



## 1847 WB-9, 1847 Repunched over 1846

**Introduction.** The 1847 over 1846 half dollar die marriage is both very popular and very rare. Collectors eagerly seek out examples for their collections as a major variety and, when they become available, they are often pricey.

The discoverer of this variety is unknown but its discovery pre-dates 1929 when it was listed without images as variety "1 A" in ML Beistle's 1929 reference on half dollar varieties. ML accurately describes it as "...Over 1846. Base of the first 4 was cut far below, and in the space between 8 and 4. Lower curve of first 6 was cut far below right serif of 4. A very high date...Exceedingly rare."

What digits were punched first? On early and middle die state examples, the remnants of an 1846 logotype punch show clearly in the field below the prominent 1847. The base of the figures 1 46 are very evident on coins grading as low as Good. The 1847 was punched high and right in the field most likely after the mispunched 1846 was punched into the working die and then effaced to remove the error. The effacing, i.e., die polishing, also removed the lowest edge of the rock support above the date as evidenced by the ragged, uneven edge. I have not seen nor am I aware of any examples of this variety with the remnants of an underlying 8 from the first punching.

1846 Medium date logotype. A frequent question is "what is the underlying 1846 date size – Medium or Tall?" I created an overlay of images of the 1847 over 1846 and an 1846 Medium and Tall dates. The Medium date, punched low and slanting down to the right, was a perfect match as shown in the overlaid image at the right.



Late die state without the 1846 punch. Whether from die wear or die abrading, the 1 46 remnants quickly disappear and later die state examples of this die marriage are known without the overdate visible. In actuality, the base of the 1 is seen on at least one example and is the last to disappear. The LDS coins without any overdate are easily identifiable by the very high date, weak lower edge of the rock support, and the doubled obverse die (primarily noticeable along the right edge of the shield). These LDS examples without the overdate have been marketed as such with huge premiums. In my opinion, the substantial premium of these LDS examples without the overdate is not warranted.

**1847/1846 Proof?** To my knowledge, a so-called proof example of this variety was first listed in the 1954 Stack's sale of the Anderson Dupont collection. Much later catalogued with oversized color images in the David Queller Collection auctioned by Stack's in October 2002, it is also described as "Brilliant Proof. Unique." There is no question that this coin is a beautiful fully struck example of this die marriage, however, there is no contemporary evidence documenting that this coin is actually a proof and not a spectacular circulation strike. Its status as a proof will continually be examined.

**Rarity.** In our 1993 reference, Randy and I estimated the rarity of this variety (EDS-MDS with the overdate showing) in all grades as an R-6-. I know of a number of examples that were cherry-picked over the years and, with other updated information, I believe it to be an R-5. Randy conducted a detailed data search and analysis and he could account for approximately 55 examples. Others are very likely out there unknown to us.

## 1847 WB-9, 1847 Repunched over 1846

#### Obverse 6



• Date high and right (photo); EDS-MDS with the remnants of the bases of the figures 1 46 in the field below and slightly to the left the 1847 date (photo below)



• LDS: the first punching is not visible.



- Doubled die obverse with most central features doubled but prominently on the right edge of the shield and Liberty's gown to the right of the shield (photo)
- LDS: clash in the field to the right of the drapery below Liberty's elbow

#### **Reverse F**



- Slanted line to the left of vertical shield line B-1 (photo)
- Since they are on the previous use of this die (WB-8), extensive die cracks thru legend and denomination (See enhanced die crack diagram.)

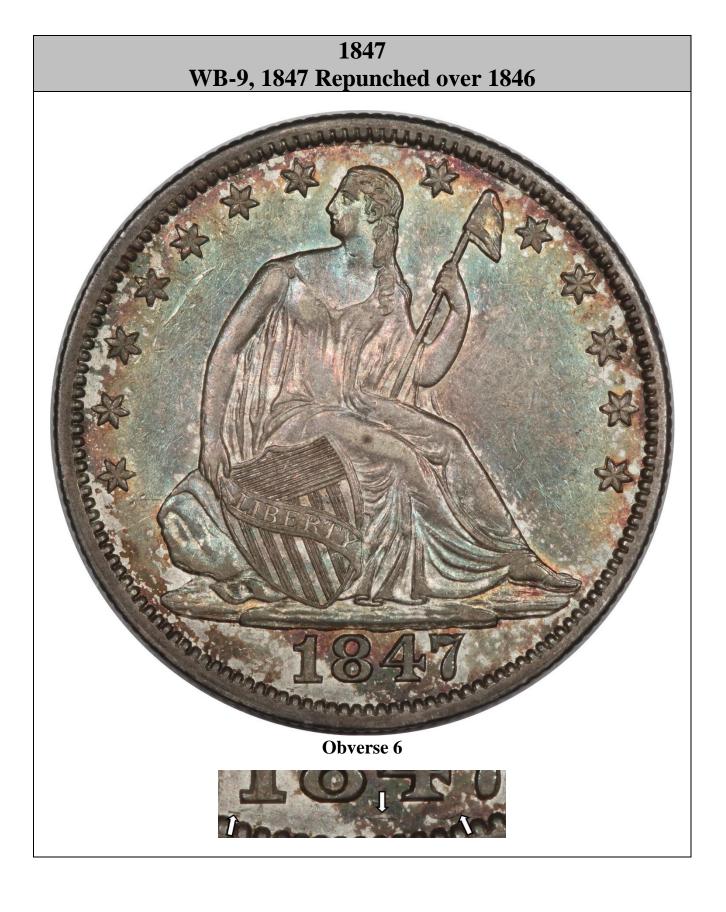
This is the first use of this obverse die and second use of this reverse die.

Date grid: M3, .008" 144 reeds Typical diameter = 1.207" Rarity - 5

Drapery die state: Full Foot support: Full Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: AU50 Coin from the Randy Wiley Collection

Cross reference: WB-102. Version 82.S





# 1847 WB-10, LDS 1847 over 1846, 2<sup>nd</sup> Reverse

Obverse 6



Date high and right (photo); the overdate (1
 46) is not visible on this die marriage. Note
 the weak die crack along the base of the date.



- Doubled die obverse with most central features doubled but prominently on the right edge of the shield and Liberty's gown to the right of the shield (photo)
- All examples: very heavy die clash in Liberty's lap and in the drapery below Liberty's elbow

Reverse G



 Numerous die lines between the dentils and letters (ST)ATE(S) (photo). Other similar very weak die lines between the dentils and letters (H)AL(F).



 Diagonal die line from dentils thru (UNIT)E(D) (photo)



- Rough crud between the feathers on the eagle's right wing (photo)
- This reverse die is transitional with 1848 (Reverse B).
- I have not seen this reverse with die cracks on this die marriage.

This is the second use of this obverse die and first use of this reverse die.							
Date grid: M3, .008"	14	4 reeds	Typical diameter = 1.205"		Rarity - 5		
Drapery die state: Full		Foot support: F	full	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: XF40				Coin from the Randy	Wiley Collection		
Cross reference: WB-102.					Version 82.S		



Obverse 7



• Date (photo). Note die line from the dentil below the right side of the 8.



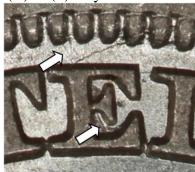
• Numerous die lines from the dentils into the fields around the circumference; prominently near star 10 at K-2 (photo above) and near the right end of the rock support (photo below), both of which are visible in all die states of this die marriage.



Reverse G



• Numerous die lines between the dentils and letters (ST)ATE(S) (photo). Other similar very weak die lines between the dentils and letters (H)AL(F) may be visible.



• Diagonal die line from dentils thru (UNIT)E(D) (photo)



- Rough crud between the feathers on the eagle's right wing (photo)
- Extensive die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)
- This reverse die is transitional with 1848 (Reverse B).

This is the onl	y use of this obverse	die and second	d use of this reverse die.	

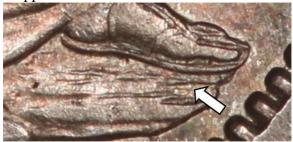
Date grid: M1, .016" 14		4 reeds	eeds Typical diameter = 1		Rarity - 3
Drapery die state: Full Foot support: Full		ull	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU55			Coin from the Randy Wiley Collection		
Cross reference: WB-101.					Version 82.S



Obverse 8



• Date low slants slightly up to right (photo) with a narrow die line thru the rock support to Liberty's toes (photo below). Note: what appears to be a reengraved foot support is actually die abrasion of the surrounding rock support area.



- Clash in the field to the right of Liberty's drapery
- Several die cracks seen thru the stars (See enhanced die crack diagram on the next page.)





- Die layout centering "hole" in the top of vertical shield lines A1-2 (photo)
- Die cracks thru legend and denomination (See enhanced die crack diagram on the next page.)
- Clash in shield's lower right
- This reverse die is transitional with 1846 (reverse D).

This is the first use of this obverse die and only use of this reverse die in 1847.					
Date grid: L5.5, .024"	14	144 reeds Typical di		ameter = 1.204"	Rarity - 4
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU55			Coin from the Randy Wiley Collection		
Cross reference: WB-101.				Version 82.S	



Obverse 8

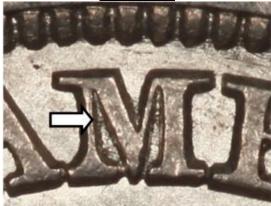


• Date low slants slightly up to right (photo) with a narrow die line thru the rock support to Liberty's toes (photo below). Note: what appears to be a reengraved foot support is actually die abrasion of the surrounding rock support area.

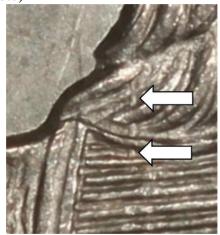


- Clash in the field to the right of Liberty's drapery
- Several die cracks seen thru the stars (See enhanced die crack diagram on the next page.)

#### **Reverse I**



Horizontal die line inside the (A)M(ERICA) (photo)

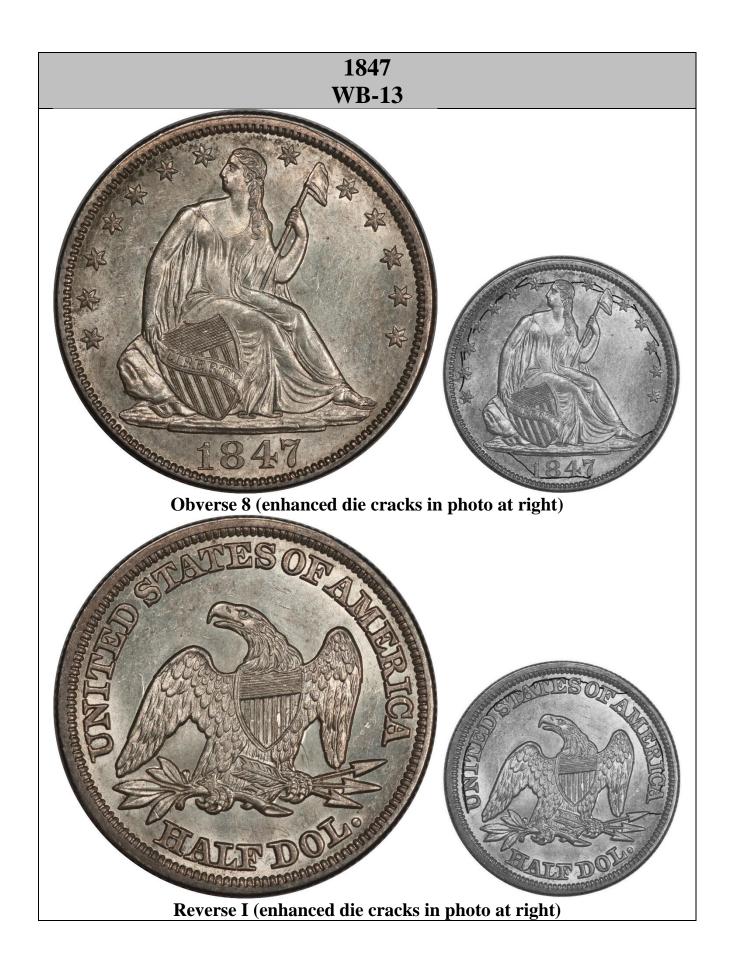


- Vertical die line, perhaps the extended vertical shield line A-3, from the shield into the eagle's neck (photo)
- Parallel die polish lines above (A)ME(RICA) and below (HA)LF
- Several die cracks seen thru the legend (See enhanced die crack diagram on the next page.)
- This reverse die is transitional with 1848 (Reverse C).

This is the second use of this obverse die and only use of this die in 1847.

This is the only die marriage in 1847 with a 145 reed count collar.

Date grid: L5.7, .026"	grid: L5.7, .026" 145 reeds		Typical diameter = 1.207"		Rarity - 4
Drapery die state: Full	ıll Foot support: Full		Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58			Coin from the Randy Wiley Collection		
Cross reference: WB-101.				Version 82.S	



#### 1848

With a fairly low mintage, 1848 has a seemingly large number of different die marriages. With seventeen die marriages made up of a combination of 12 obverse and 9 reverse dies, the math works out that there is an average of approximately 34,000 coins per die marriage. Assuming a very high attrition from the late 1849 / early 1850s melting, each 1848 die marriage should be at least rare; this date is scarce but available even accounting for the few very rare varieties. It is entirely possible that the mintage figure for this date is higher than the 580,000 pieces reported.

Seventeen die marriages are known as depicted in the tables below.

Mintage	Number of	Obverse	Reverse	Reed Counts
	Die Marriages	Dies	Dies	Known
580,000	17	12	9	2 (144, 145)

**Open and closed 4.** Various sources identify 1848 half dollars with an open and a closed 4 date logotype which is a differentiation of the distance between the crossbar's lower serif and the right base of the 4. As we mentioned in our 1993 "Complete Guide," Randy Wiley and I believe that the open and closed 4 characteristics resulted from the amount of force used to emplace the date into the die or from the die polishing of the coin studied. We have documented cases were the same obverse die has both the open 4 and closed 4 in different die states.

**Notched 1.** All 1848 half dollars have a notch on the lower left base of the 1 (see image of an 1848 WB-7 at the right). This includes all the obverse dies used on all 1848 half dollars from both mints: Philadelphia and New Orleans. This feature is noticeable even on low grade coins.

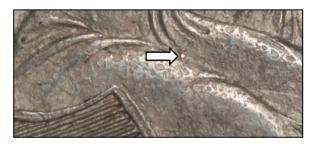
In background, the dates and mintmarks for the Liberty Seated series were punched by hand or later, by a large screw, into the working dies at Philadelphia (hence, the date and mintmark placement variations). The dates were punched using a date gangpunch consisting of between two and four digits of the desired date on a punch (There has been some controversy over how many digits were on a date gangpunch but that is not addressed here.). The number of individual date gangpunches available for each year's use is unknown. Nevertheless, the punch used for 1848 half dollars had a defect in the shape of a notch in the lower left base of the 1. Logically, a notch on the date punch should be visibly



apparent. Perhaps the punch was dropped prior to use and a "dent" was imparted. Perhaps the notch was intentionally affected as a signature of a mint employee. We will most likely never know but notched punches are known on another half dollar date (1856) and on other series including early Liberty Seated half dimes (see *Gobrecht Journal*, Volume 27, Issue Number 80, pages 39-41), 1820 bust dimes, and early capped bust half dollars.

**1848** acid etched – "raised" center dot obverse die. One 1848 obverse die (Obverse 1 used on WB-1 thru WB-3) is particularly notable for two particular characteristics described herein. All the raised

devices (i.e., Liberty) have very rough and pitted surfaces. In my opinion, this characteristic likely resulted from acid etching of this working die or, at the very least, lack of proper preparation during die storage (i.e., light coating of oil). Because the raised features of this die are etched, the die's lowest features are Liberty – some sort of corrosive liquid likely rested on top of the die and the resulting



surface roughness was not removed when the die was polished prior to use.

Additionally, this die has a "raised" center dot. Because it is raised, it was a depression in the working die and most likely resulted from a compass point used as a working layout on the hub. This feature is common on Bust coinage but rarely seen on Liberty Seated coinage.

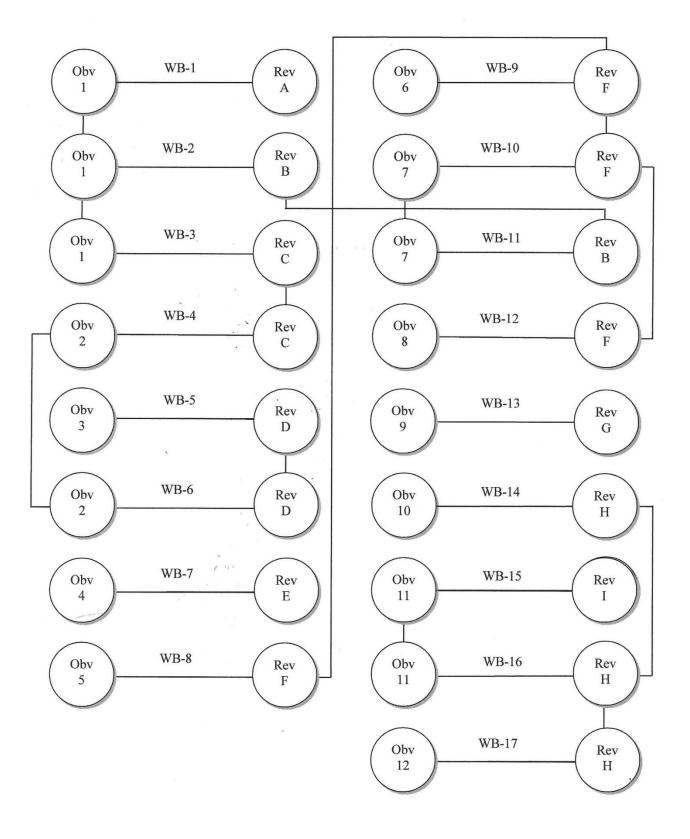
1848 date grid quick reference table

Obverse die date grid	Die Marriage
	0
L5, .014"	WB-17
L5, .016"	WB-14
L5, .018"	WB-13
L5.5, .008"	WB-4
L5.5, .008"	WB-6
L5.5, .008"	WB-7
L5.5, .022"	WB-5
L5.5, .024"	WB-12
M1, .010"	WB-8
M1, .014"	WB-9
M1, .016"	WB-15
M1, .020"	WB-16
M2, .021"	WB-10
M2, .022"	WB-11
M2.5, .018"	WB-1
M2.5, .020"	WB-2
M2.5, .021"	WB-3

### **1848 Half Dollar Date Positions**



# 1848 Half Dollar Die Linkage Diagram



1848 Obverse and Reverse die identification keys		Tine shaped die line from the dentil above (S)T(ATES)	Rough crud between the feathers on the eagle's right wing	Vertical die line, perhaps the extended vertical shield line A3, from the shield into the eagle's neck	Vertical die lines, perhaps the extended vertical shield lines, from the shield into/out of the eagle's neck	Doubled die reverse	Many die lines between the dentils and the letters (STA)TE(S)	Die lines between the dentils and the letters UNIT(ED)	Vertical shield line A1 extends into the eagle's neck feathers	Diagonal lines in the lower left and almost horizontal lines in the lowest portion of the shield
	1	A	В	C	D	E	ľ	G	H	I
Horizontal die lines along the dentils to the right of the date	1	WB-1	WB-2	WB-3						
Repunched 4	2			WB-4	WB-6					
No usable die diagnostics seen other than date position	3				WB-5					
Repunched 18	4					WB-7				
Tine-like die line in and from the dentil above the star 12	5						WB-8			
Crumbling Die – V1	6						WB-9			
Rust "crud" by pole and arm	7		WB-11				WB-10			
Repunched 184	8						WB-12			
Small rim cud to left of date	9							WB-13		
Small die line from the dentil above star 8	10								WB-14	
Crumbling Die – V2	11								WB-16	WB-15
Rust lumps in the shield below the (LI)B(ERTY)	12								WB-17	

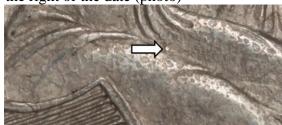
#### Obverse 1



• Date right (photo)



• Nearly horizontal die lines along the dentils to the right of the date (photo)



- Rough and pitted devices likely from acid etching (photo)
- Possible raised center dot in Liberty's lap (photo above). See 1848 introductory text.

Reverse A



 Tine shaped die line from the dentil above (S)T(ATES) (photo)

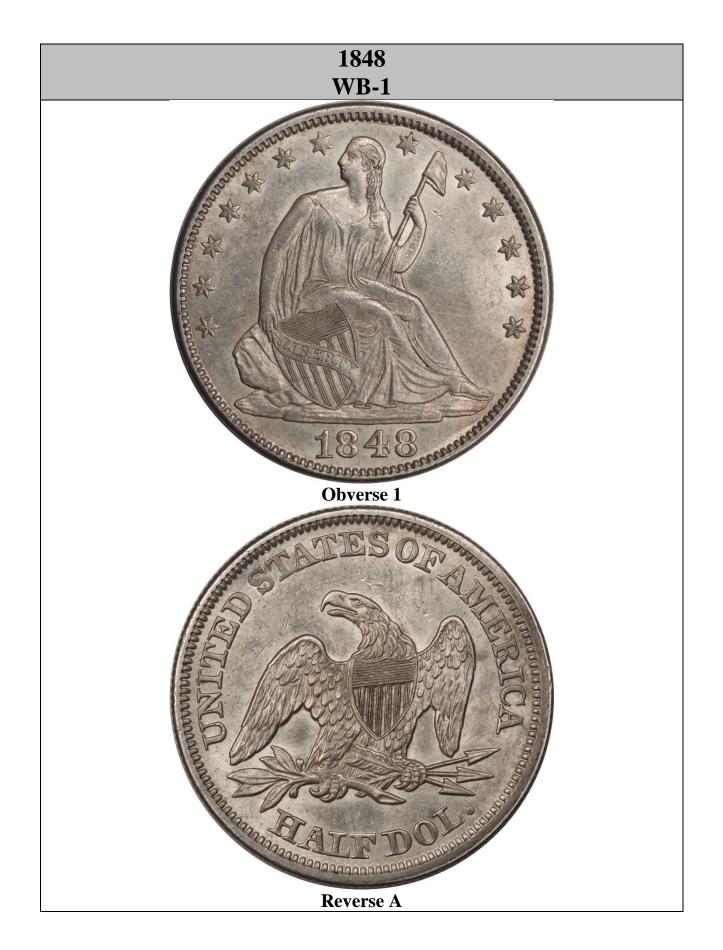


• Distinctive vertical shield lines extending into the eagle's feathers (photo)

Rarity - 3

This is the first use of this	obverse die and only	use of this reverse die.
Date grid: M2.5, .018"	145 reeds	Typical diameter = 1.205"

Drapery die state: Full	Foot support: Full	Dentils: Obverse - Full; Reverse - Full
Grade of coin depicted: MS61		Coin from the Randy Wiley Collection
Cross reference: WB-101.		Version 82.S



Obverse 1



Date right (photo)



• Nearly horizontal die lines along the dentils to the right of the date (photo), now weaker than on the previous use of this die (WB-1).



- Rough and pitted devices likely from acid etching (photo)
- Possible raised center dot in Liberty's lap (photo above). See 1848 introductory text.

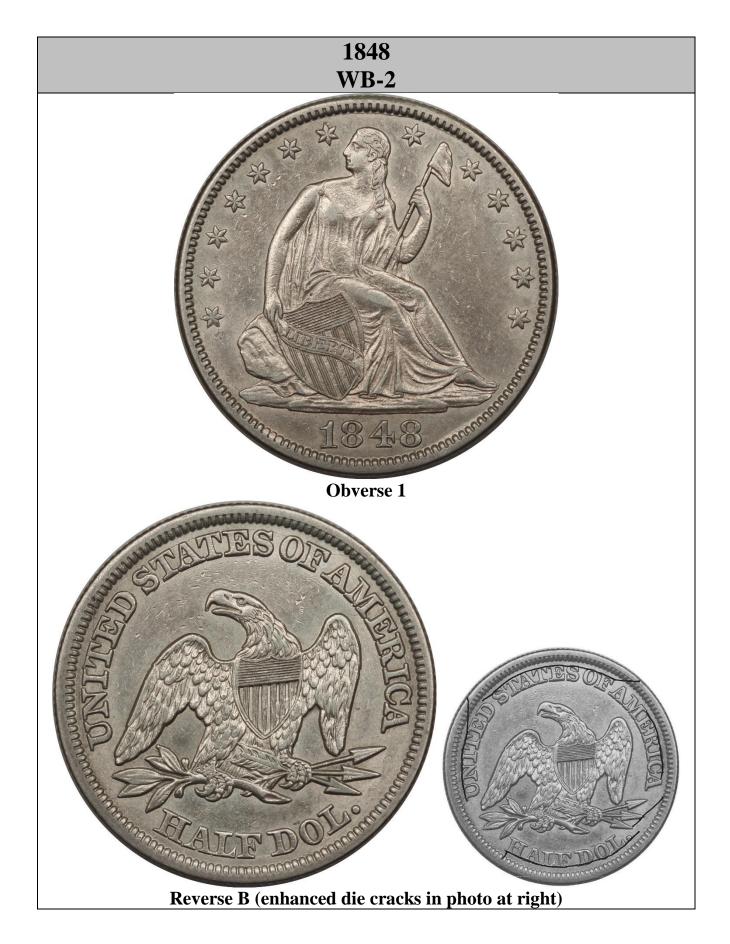




- Rough crud between the feathers on the eagle's right wing (photo)
- Extensive die cracks thru the legend and denomination. (See enhanced die cracked diagram on the next page.)
- This reverse die is transitional with 1847 (Reverse G).

This is the second use of this obverse die and first use of this die in 1848.

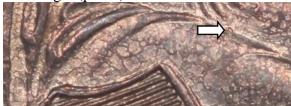
Date grid: M2.5, .020" 14:		145 reeds Typical		ameter = 1.204"	Rarity - 3
Drapery die state: Full Foot supp		Foot support: F	ull	Dentils: Obverse - Fu	ll; Reverse - Full
Grade of coin depicted: AU50				Coin from the Bill Bu	gert Collection
Cross reference: WB-101.					Version 82.S



Obverse 1

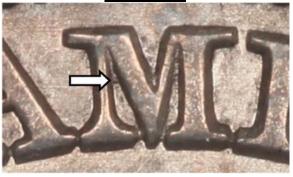


Date right (photo)

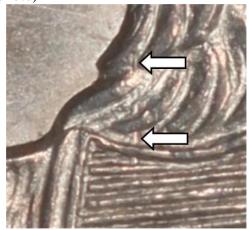


- Rough and pitted devices likely from acid etching (photo)
- Possible raised center dot in Liberty's lap (photo above). See 1848 introductory text.
- The horizontal die lines along the dentils to the right of the date seen in the previous uses of this die (WB-1 and WB-2) are not now visible.

#### Reverse C

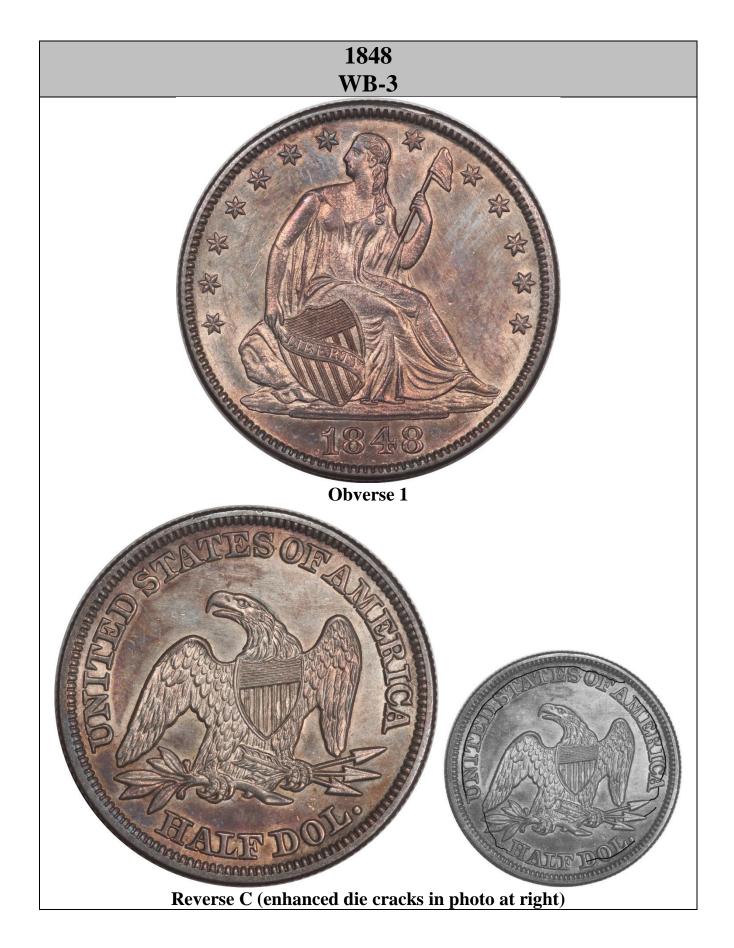


 Horizontal die line inside the (A)M(ERICA) (photo)



- Vertical die line, perhaps the extended vertical shield line A-3, from the shield into the eagle's neck (photo)
- See enhanced die crack diagram on the next page.
- This reverse die is transitional with 1847 (Reverse I).

This is the third use of this obverse die and first use of this reverse die in 1848.							
Date grid: M2.5, .021"	21" 145 reeds		Typical diameter = 1.204"		Rarity - 3		
Drapery die state: Full Foot support: F		'ull	Dentils: Obverse - Fu	ll; Reverse - Full			
Grade of coin depicted: MS62				Coin from the Bill Bu	gert Collection		
Cross reference: WB-101.					Version 82.S		



## 1848 WB-4, Repunched 4, So-called 1848/7

Obverse 2



• Date left and very high (photo) with the 4 repunched to the northwest (photo below)





 Many nearly horizontal die lines thru Liberty's gown to the right of the shield (photo) Reverse C

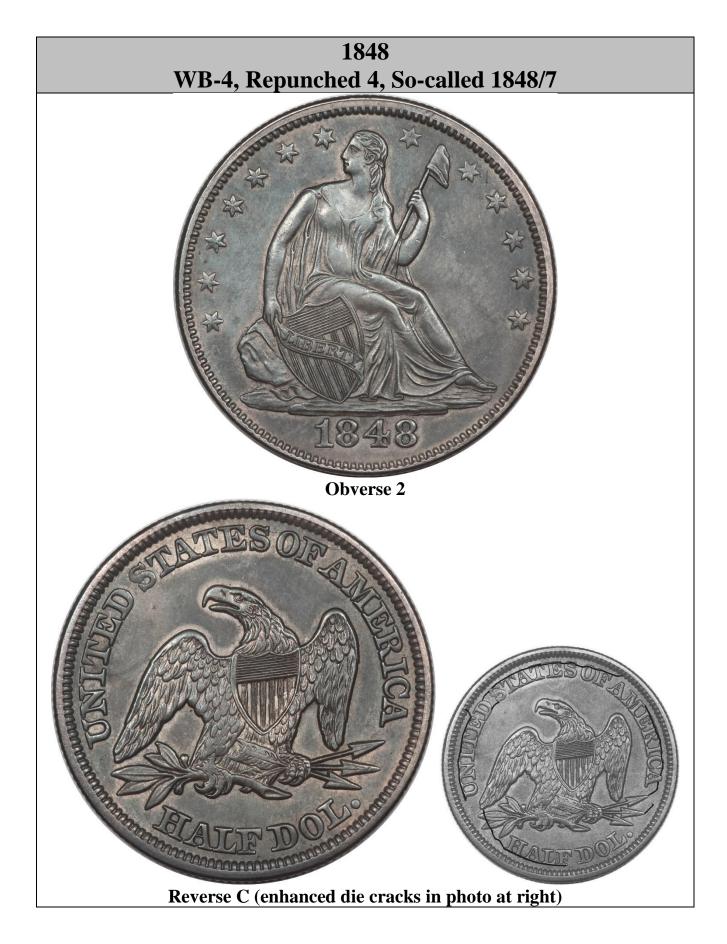


 Horizontal die line inside the (A)M(ERICA) (photo)



- Vertical die line, perhaps the extended vertical shield line A-3, from the shield into the eagle's neck (photo)
- Extensive die cracks thru the legend (See enhanced die crack diagram on the next page.)
- This reverse die is transitional with 1847 (Reverse I).

This is the first use of this obverse die and second use of this reverse die.							
Date grid: L5.5, .008"	14	5 reeds	Typical diameter = 1.202"		Rarity - 3		
Drapery die state: Full Foot support: F			ull	Dentils: Obverse - Fu	ll; Reverse - Full		
Grade of coin depicted: A	U55	,	Coin from the Randy	Wiley Collection			
Cross reference: WB-102.					Version 82.S		

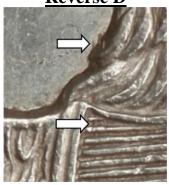


Obverse 3



- Date left and low (photo)
- No usable die diagnostics seen other than date position

Reverse D



 Vertical die lines, perhaps the extended vertical shield lines, from the shield into/out of the eagle's neck (photo)

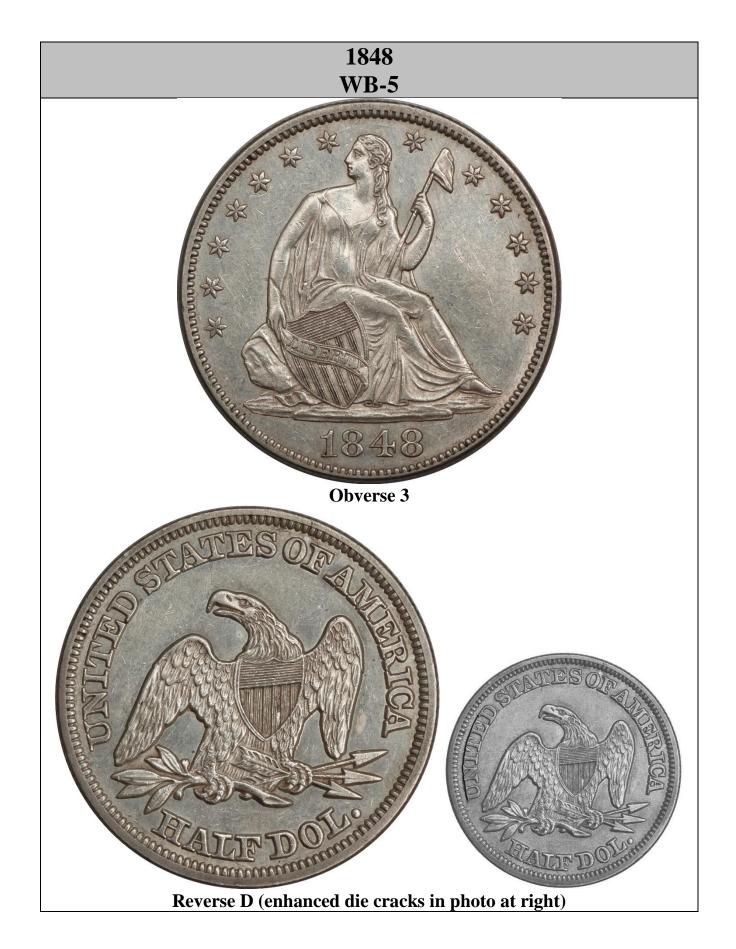


 Prominent diagonal die line in the lowest part of the shield (photo); other less prominent die lines higher in the shield.



- Raised patch of metal below the (HA)LF seen on all examples of this die marriage.
- Clash in shield's lower right
- This reverse die is transitional with 1849 (Reverse K).

This is the only use of this obverse die and first use of this reverse die in 1848.							
Date grid: L5.5, .022"	5, .022" 145 reeds T		Typical diameter = 1.203"		Rarity - 4		
Drapery die state: Full		Foot support: V	Veak	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: A	U50	)	Coin from the Randy	Wiley Collection			
Cross reference: WB-101.					Version 82.S		

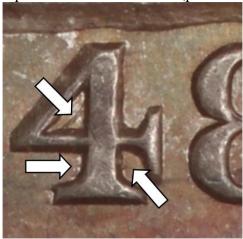


### 1848 WB-6, Repunched 4, So-called 1848/7

Obverse 2



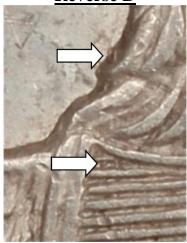
• Date left and very high (photo) with the 4 repunched to the northwest (photo below)



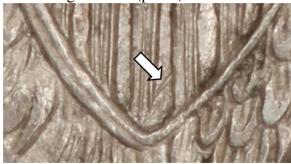


• Many nearly horizontal die lines thru Liberty's gown to the right of the shield (photo)

Reverse D



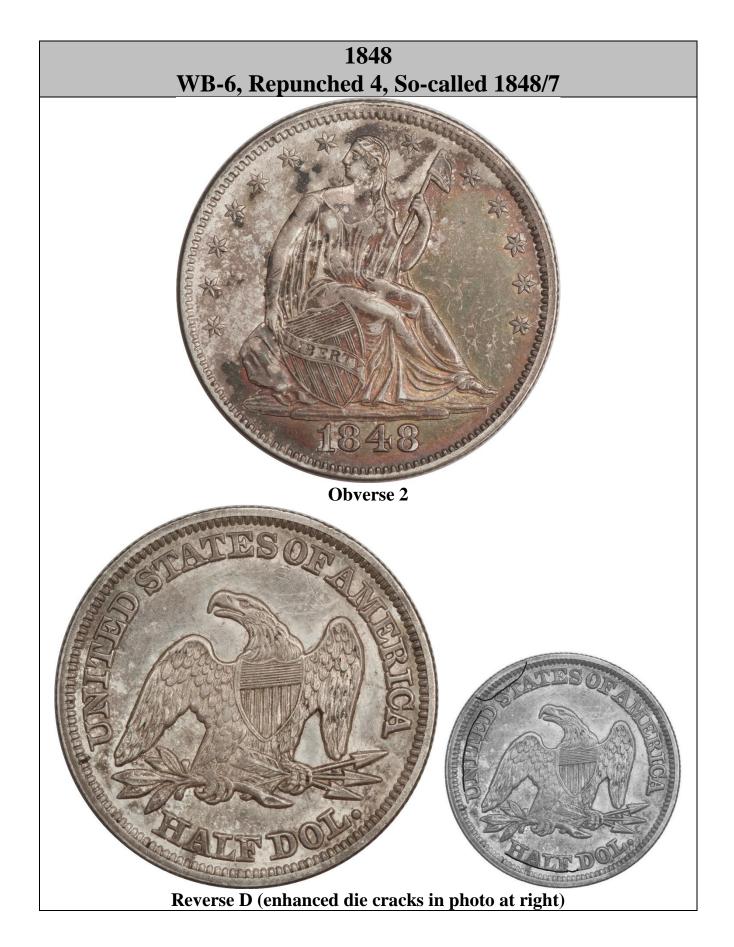
 Vertical die lines, perhaps the extended vertical shield lines, from the shield into/out of the eagle's neck (photo)



- Prominent diagonal die line in the lowest part of the shield (photo); other less prominent die lines higher in the shield.
- The raised patch of metal below the (HA)LF seen on the previous use of this die (WB-5) is not now visible.
- Clash in shield's lower right
- See enhanced die crack diagram on the next page.
- This reverse die is transitional with 1849 (Reverse K).

Tr	nis is t	he second	use of	this c	obverse d	ie and	second	l use of	this r	everse o	lie in 184	<del>1</del> 8.
----	----------	-----------	--------	--------	-----------	--------	--------	----------	--------	----------	------------	-----------------

Date grid: L5.5, .008"	145 reeds		Typical di	ameter = 1.204"	Rarity - 3
Drapery die state: Full	Foot support: Fo		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU55				Coin from the Randy	Wiley Collection
Cross reference: WB-102.					Version 82.S



## 1848 WB-7, Repunched 18, Doubled Die Reverse

Obverse 4



• Date far left and high (photo) with the 18(48) repunched south (photo below)



**Reverse** E

 Doubled die reverse with doubling on the eagle's upper right feathers and letters OF AMERICA in legend (photo)



- Scattered die lines in the lower shield (photo); note also the repaired upper vertical lines A1-3.
- Vertical shield line A1 extends to the upper edge of the shield (photo at right)
- LDS: die cracks thru legend and denomination.



(See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.							
Date grid: L5.5, .008"	L5.5, .008" 144 reeds		Typical diameter = 1.207"		Rarity - 3		
Drapery die state: Full Foot support: F			ull	Dentils: Obverse - Fu	ll; Reverse - Full		
Grade of coin depicted: PCGS AU55				Coin from the Bill Bu	gert Collection		
Cross reference: WB-103.					Version 82.S		



#### Obverse 5



- Date (photo)
- Sharp, tine-like die line in and from the dentil above the star 12 (photo)



#### Reverse F



 Many die lines between the dentils and the letters (STA)TE(S) (photo); other weaker diagonal lines above(U)NITE(D). Note the distinctive die crack above (STA)T(ES).

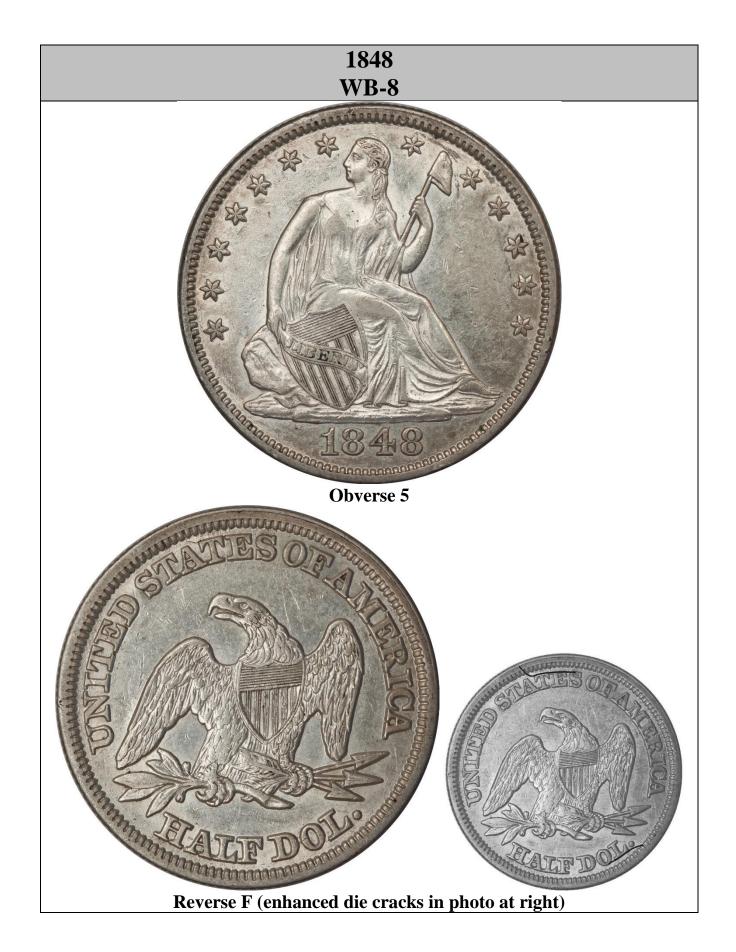


- Double lump defect on the (AMERIC)A's upper right (photo)
- A few die cracks starting in the denomination and legend. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and first use of this reverse die.

At least one LDS example seen with a reverse rotated 14° CCW.

The ready one EDS chample seen with a reverse rotated 11 CCVV.							
Date grid: M1, .010"	144 reeds		Typical di	ameter = 1.202"	Rarity - 3		
Drapery die state: Full Foot support: I		Foot support: F	ull	Dentils: Obverse - Fu	ll; Reverse - Full		
Grade of coin depicted: AU50				Coin from the Bill Bu	gert Collection		
Cross reference: WB-101.					Version 82.S		



### 1848 WB-9, Crumbling Die - V1

Obverse 6



Date (photo)



• Heavy rusting/die crumbling along the edges of the stars and Liberty and in various sections of the fields; prominently around the upper portion of Liberty, the pole and cap, and the adjacent stars (photo)

Reverse F



 Many die lines between the dentils and the letters (STA)TE(S), now much weaker than on the previous use of this die (WB-8) (photo). Note the distinctive die crack above (STA)T(ES).



- Double lump defect on the (AMERIC)A's upper right (photo)
- Die cracks in the denomination and legend.
   (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and second use of this reverse die.						
Date grid: M1, .014"	144 reeds		Typical diameter = 1.207"		Rarity - 4	
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: A	U53	3	Coin from the Bill Bugert Collection			
Cross reference: WB-101.					Version 82.S	



Obverse 7



• Date (photo) with a slightly repunched 4; remnants of a previous punching show above and below the crossbar of the 4 (photo below)





• Rust "crud" by pole and arm (photo)

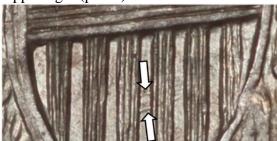




• The die lines between the dentils and the letters (STA)TE(S) seen on the previous uses of this die (WB-8 and WB-9) are now only faintly visible (photo). Note the distinctive die crack above (STA)T(ES).



 Double lump defect on the (AMERIC)A's upper right (photo)



- Two horizontal die lines in the lower shield (photo)
- Die cracks in the denomination and legend. (See enhanced die crack diagram on the next page.)

This is the first use of this obverse die and third use of this reverse die.						
Date grid: M2, .021"	144 reeds		Typical diameter = 1.206"		Rarity - 5	
Drapery die state: Full	e: Full Foot support: F		'ull	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: XF45				Coin from the Randy Wiley Collection		
Cross reference: WB-101.					Version 82.S	



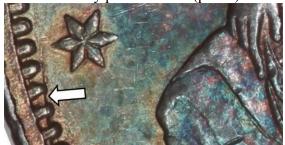
Obverse 7



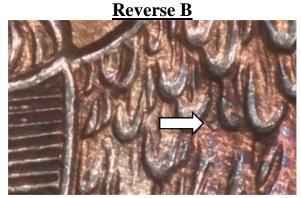
• Date (photo) but the slightly repunched 4 visible in the previous use of this die (WB-10) is not now visible



• Rust "crud" by pole and arm (photo)



• Raised die defect from the dentils to the left of the rock to star 1 (photo). This defect is not visible on the previous use of this die (WB-10).



- Rough crud between the feathers on the eagle's right wing (photo)
- Extensive die cracks thru the legend and denomination. (See enhanced die cracked diagram on the next page.)
- Clash in shield's lower right
- This reverse die is transitional with 1847 (Reverse G).

This is the second use of this obverse die and second use of this reverse die.

Date grid: M2, .022" 144 reeds Typical diameter = 1.207"

Date grid: M2, .022" | 144 reeds | Typical diameter = 1.207" | Rarity - 4

Drapery die state: Full | Foot support: Full | Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: MS64 | Coin from the Randy Wiley Collection

Cross reference: WB-101. | Version 82.S



### 1848 WB-12, Repunched 184

Obverse 8



• Date left and low (photo) with the 1 repunched south, the 8 repunched north and the 4 slightly repunched north (photo below)





• Curved line in Liberty's lap to the left of the base of the pole (photo)

Reverse F



The die lines between the dentils and the letters (STA)TE(S) seen on the previous uses of this die (WB-8, WB-9, and WB-10) are now only faintly visible (photo). Note the distinctive die crack above (STA)T(ES).

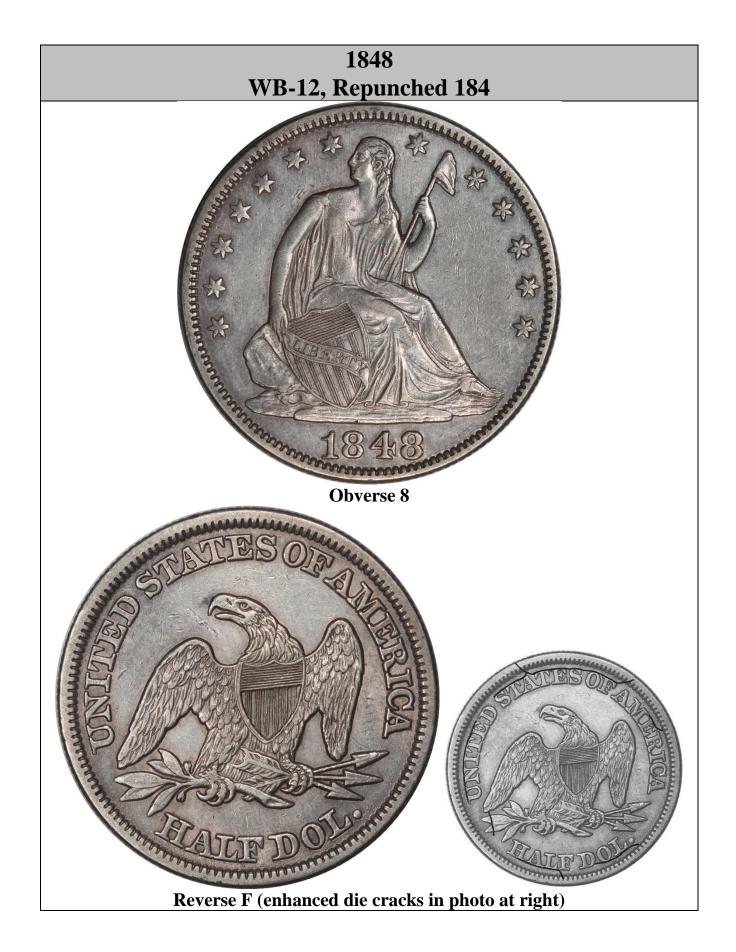


- Double lump defect on the (AMERIC)A's upper right (photo)
- The two horizontal die lines in the lower shield seen on the previous use of this die (WB-10) are not now visible.
- Die cracks in the denomination and legend (See enhanced die crack diagram on the next page.)
- Clash in shield's lower right

This is the only use of this obverse die and the fourth use of this reverse die.

This die marriage may be rarer than R-6. I have seen only three examples of this and could not find an upgrade to my VF after many years of looking. Dick Osburn called my attention to its rarity as an R-7 and he may be correct.

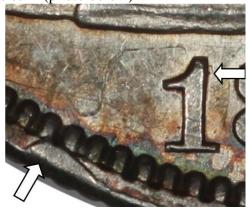
Date grid: L5.5, .024"	144 reeds		Typical di	ameter = 1.206"	Rarity - 6
Drapery die state: Full	Foot support:		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU50				Coin from the Randy	Wiley Collection
Cross reference: WB-104.					Version 82.S



Obverse 9



Date far left (photo) with a tiny tine on the upright of the 1(848) on the opposite side of the serif (photo below)



- Small rim cud to left of date seen on all examples of this die marriage (photo). On high grade examples, another smaller rim cud is visible at K-5.
- (See enhanced die crack diagram on the next





Die lines between the dentils and the letters UNIT(ED) (photo)



- Small lump on the inside of the (AMERI)C(A) (photo)
- Weak diagonal (NE to SW) die lines in the lower shield
- Die cracks in the denomination and legend. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.

Date grid: L5, .018"	144 reeds		Typical di	ameter = 1.204"	Rarity - 4
Drapery die state: Full	Foot support: I		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU53				Coin from the Bill Bugert Collection	
Cross reference: WB-101.				Version 82.S	



Obverse 10



• Date far left slanting down to the right (photo)

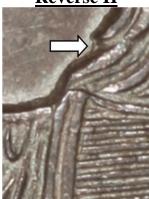


• Small die line from the dentil above star 8 (photo)



• Circumferential die crack along the dentils and on the rim from star 1 to 7; stars 1-3 shown above (photo)





• Vertical shield line A-1 extends into the eagle's neck feathers (photo)



• Small diagonal die line on the inside upper right of the lower portion of the shield (photo). Note also, the repaired upper vertical shield lines A1-3.



• Short die line on the inside of the eagle's right claw (photo)

This is the only use of this obverse die and first use of this reverse die.

Date grid: L5, .016" 144 reeds Typical diameter = 1.206" Rarity - 4

Drapery die state: Full Foot support: Full Dentils: Obverse - Full; Reverse - Full

Grade of coin depicted: AU55 Proof-like Coin from the Randy Wiley Collection

Cross reference: WB-101. Version 82.S



# 1848 WB-15, Crumbling Die - V2

Obverse 11



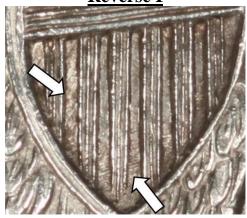
• Date (photo)



Heavy rusting/die crumbling along the edges
of the stars and Liberty and in various section
of the fields; prominently around stars 6-7
(photo above), the date (photo far above),
Liberty's right leg and shin, and the pole
(photo below).



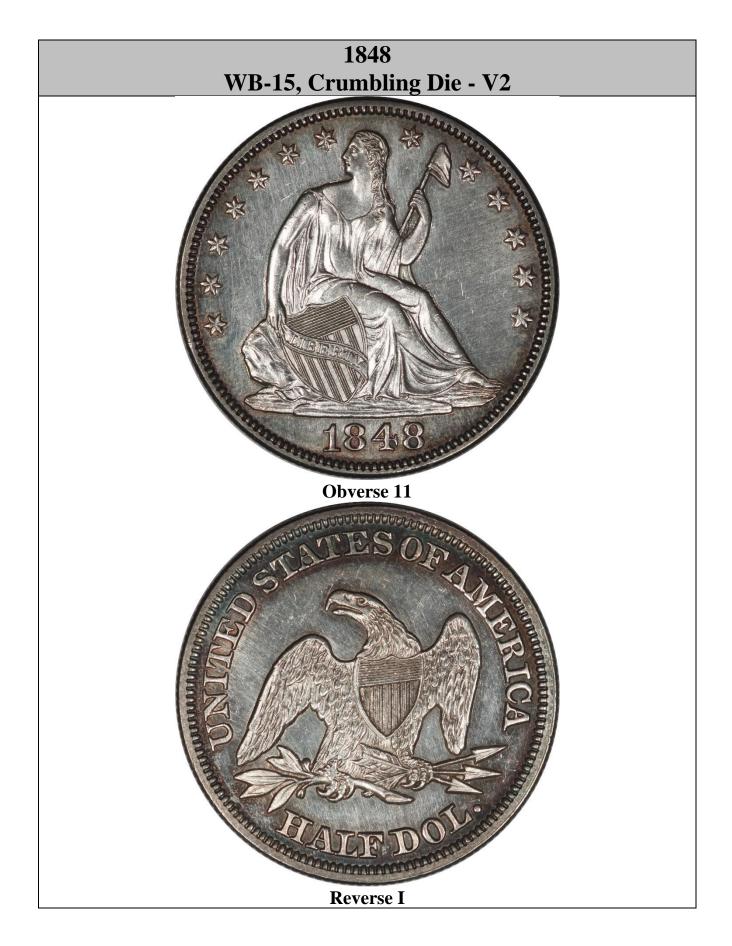
Reverse I



 Diagonal (NE to SW) lines in the lower left and almost horizontal lines in the lowest portion of the shield (photo)

This is the first use of this obverse die and only use of this reverse.

Date grid: M1, .016"	144 reeds		Typical di	ameter = 1.208"	Rarity - 3
Drapery die state: Full	Foot support: I		full	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: MS62				Coin from the Randy Wiley Collection	
Cross reference: WB-101.					Version 82.S



### 1848 WB-16, Crumbling Die - V2

Obverse 11



• Date (photo)



• Much of the rusting/die crumbling seen in the previous use of this die (WB-15) has been polished away but remnants show along the edges of the stars and Liberty and in various section of the fields; prominently around stars 6-7 (photo above), the date (photo far above), Liberty's right leg and shin, and the pole (photo below).



**Reverse H** 



- Vertical shield line A-1 extends into the eagle's neck feathers (photo)
- The small diagonal die line on the inside upper right of the lower portion of the shield is now very weak.



- Short die line on the inside of the eagle's right claw (photo)
- Die cracks in the denomination and legend. (See enhanced die crack diagram on the next page.)

This is the second use of this obverse die and second use of this reverse die.							
Date grid: M1, .020"	144 reeds		Typical diameter = 1.205"		Rarity - 5		
Drapery die state: Full Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: AU50				Coin from the Bill Bugert Collection			
Cross reference: WB-101.					Version 82.S		



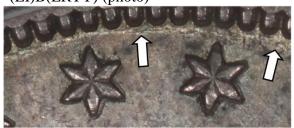
#### **Obverse 12**



• Date far left (photo)



• Rust lumps in the shield below the (LI)B(ERTY) (photo)



• Circumferential die crack along the dentils from star 2 to 6; stars 2-3 shown above (photo). This die crack is similar but not the same as seen on WB-14.





- Vertical shield line A-1 extends into the eagle's neck feathers (photo)
- The small diagonal die line on the inside upper right of the lower portion of the shield is now very weak.



- Short die line on the inside of the eagle's right claw (photo)
- Die cracks in the denomination and legend (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and third use of this reverse die.

Date grid: L5, .014"	144 reeds		Typical di	ameter = 1.207"	Rarity - 3
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PCGS AU50				Coin from the Bill Bu	gert Collection
Cross reference: WB-101.					Version 82.S



### 1849

Often considered under-rated, this date is usually reasonably priced below MS grade levels and has enough availability to satisfy collector demand. Identifying the die marriages is relatively easy - there are a few repunched dates and most dies are fully struck with die defects and at least some die cracking in later die states to assist in identification. The WB-6, dramatically doubled dates, is one of the key die varieties of Liberty Seated half dollar series.

Fifteen die marriages are known as depicted in the tables below.

Mintage	Number of	Obverse	Reverse	Reed Counts
	Die Marriages	Dies	Dies	Known
1,252,000	15	11	11	2 (144, 145)

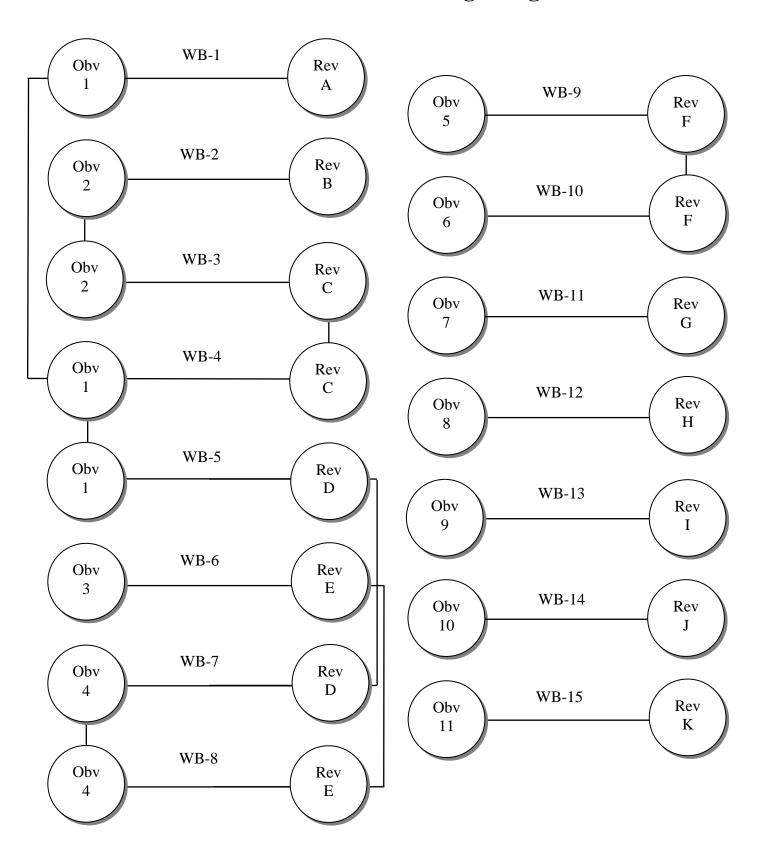
# 1849 date grid quick reference table

o is auto Sita quien	t cici ciice tan
Obverse die date grid	Die Marriage
L5.5, .018"	WB-5
L5.5, .020"	WB-1
L5.5, .020"	WB-4
M1, .016"	WB-15
M1, .018"	WB-2
M1, .018"	WB-6
M1, .019"	WB-3
M1, .020"	WB-12
M1, .025"	WB-14
M1.5, .018"	WB-7
M1.5, .018"	WB-8
M1.5, .018"	WB-9
M1.5, .020"	WB-10
M2, .020"	WB-11
M2.5, .020"	WB-13

### **1849 Half Dollar Date Positions**



# 1849 Half Dollar Die Linkage Diagram



1849 Obverse a Reverse d identificat keys	lie	Vertical lines from the left upper shield lines into the eagle's neck feathers	Die line thru olive leaves 2-3	Many parallel and diagonal (NE to SW) die lines in the recessed area of the lower shield	Multiple die lines from the eagle's left wing to olive leaf #3	Diagonal die lines in the upper left corner of the lower shield	No usable die diagnostics seen other than die cracks	Many parallel diagonal (NE to SW) die lines in the recessed area of the lower shield	Diagonal die lines in the upper left corner of the lower shield area and lump on the middle of shield lines B1-2	Diagonal (NW to SE) die lines in the upper right corner of the lower shield	Triangular shaped raised metal under the eagle's right wing	Prominent diagonal die line in the lowest part of the shield
		A	В	C	D	E	F	G	H	I	J	K
Small tine from dentils at K-7	1	WB-1		WB-4	WB-5							
Repunched 9	2		WB-2	WB-3								
Dramatically Doubled Date	3					WB-6						
Die line thru the dentils above Liberty's head	4				WB-7	WB-8						
<b>Doubled Date</b>	5						WB-9					
Errant 8 from Dentil	6						WB-10					
Repunched 1	7							WB-11				
Attribution difficult – see die marriage	8								WB-12			
Repunched 184	9									WB-13		
Die cracks thru stars 1-8	10										WB-14	
Rust patch on Liberty's left arm below the elbow	11											WB-15

#### Obverse 1



 Date (photo). In some EDS examples, there are raised splotches of metal to the left of the bases of the date (photo below). On more than one occasion, this has been mistaken for the rare dramatically doubled date variety (WB-6). It is not. This raised metal disappears with die wear and die polishing.





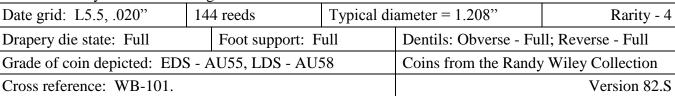
• Small tine from dentils at K-7 (photo)



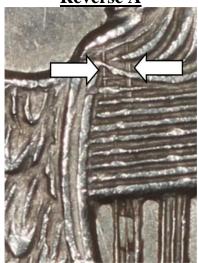
• Die line at the end of the rock support (photo)

This is the first use of this obverse die and only use of this reverse die.

This is the only 1849 die marriage with a 144 reed count collar.







- Vertical lines from the left upper shield lines into the eagle's neck feathers (photo). Note also the die layout centering "hole" in the top of vertical shield lines A1-2.
- Die cracks thru legend, denomination, and bisecting the reverse. (See enhanced die crack diagram on the next page.)



# 1849 WB-2, Repunched 9

**Obverse 2** 

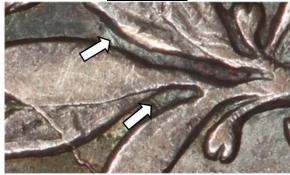


• Date slants down to right (photo) with the (184)9 repunched to the northeast (photo below)



- Die line in the rock support to the ball of Liberty's foot; another from the dentil to the right of the toes (photo)

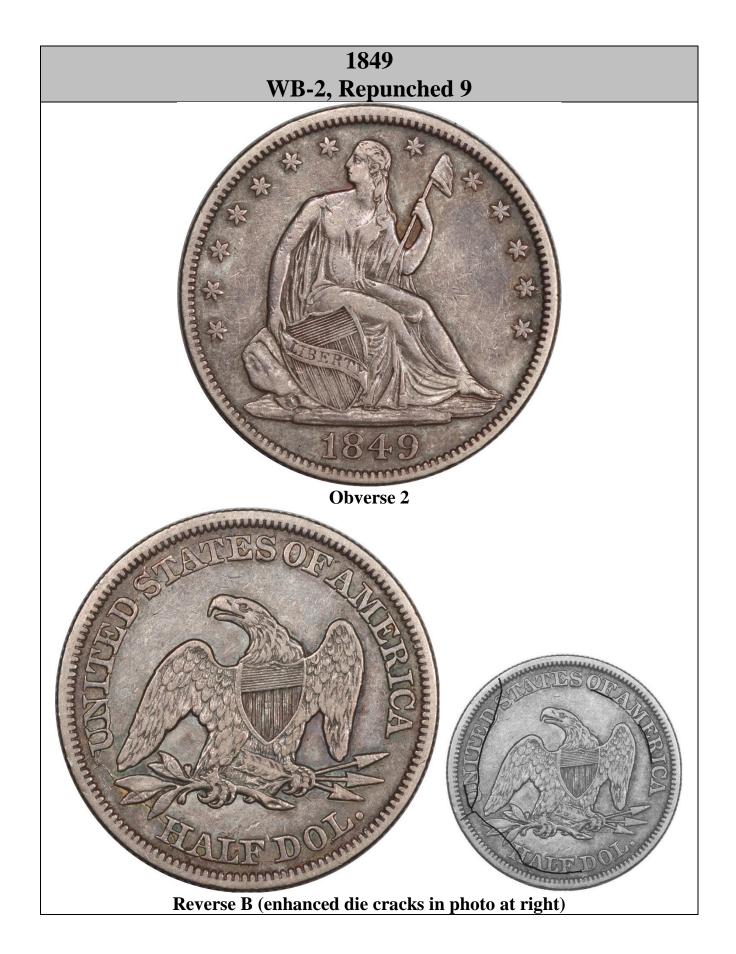




- Die line thru olive leaves 2-3 (photo)
- All examples seen: extensive die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the first use of this obverse die and only use of this reverse die.

Date grid: M1, .018"	145 reeds		Typical di	ameter = 1.200"	Rarity - 3
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: VF30				Coin from the Bill Bu	gert Collection
Cross reference: WB-105.					Version 82.S



# 1849 WB-3, Repunched 9

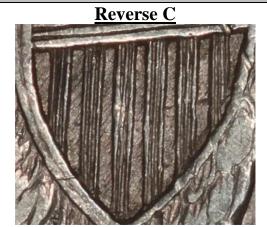
Obverse 2

1849

• Date slants down to right (photo) with the (184)9 repunched to the northeast (photo below)



- Die line in the rock support to the ball of Liberty's foot (photo); the line from the dentil to the right of the toes seen in the previous use of this die (WB-2) is not now visible.
- Rim cuds visible at K-12 and K-7



- Many parallel and diagonal (NE to SW) die lines in the recessed area of the lower shield (photo)
- All examples seen: die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the second use of this obverse die and first use of this reverse die.								
Date grid: M1, .019"	14	145 reeds Typical d		Typical diameter = 1.201" Rai				
Drapery die state: Full	ıll Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full				
Grade of coin depicted: XF40				Coin from the Bill Bu	gert Collection			
Cross reference: WB-105.					Version 82.S			



Obverse 1



• Date (photo)



• Small tine from dentils at K-7 (photo)



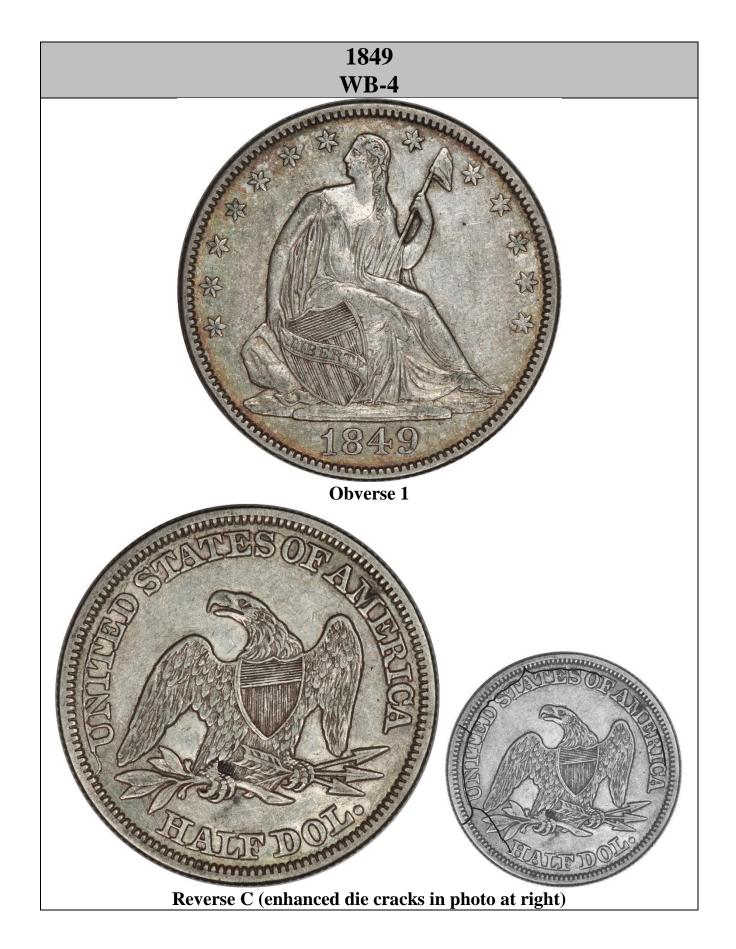
• Die line at the end of the rock support now very weak compared to the previous use of this die (WB-1) (photo)





- Many parallel and diagonal (NE to SW) die lines in the recessed area of the lower shield now much weaker compared to the previous use of this die (WB-3) (photo)
- All examples: die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)
- Clash in shield's lower right

This is the second use of this obverse die and second use of this reverse die.							
Date grid: L5.5, .020"	14	5 reeds	Typical di	ameter = 1.203"	Rarity - 4		
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: X	XF45 Coin from the Randy Wiley Collect				Wiley Collection		
Cross reference: WB-101.					Version 82.S		



Obverse 1



• Date (photo)



- Small tine from dentils at K-7, now very weak (photo)
- The die line at the end of the rock support seen on the previous uses of this die (WB-1 and WB-4) is not now visible.

Reverse D



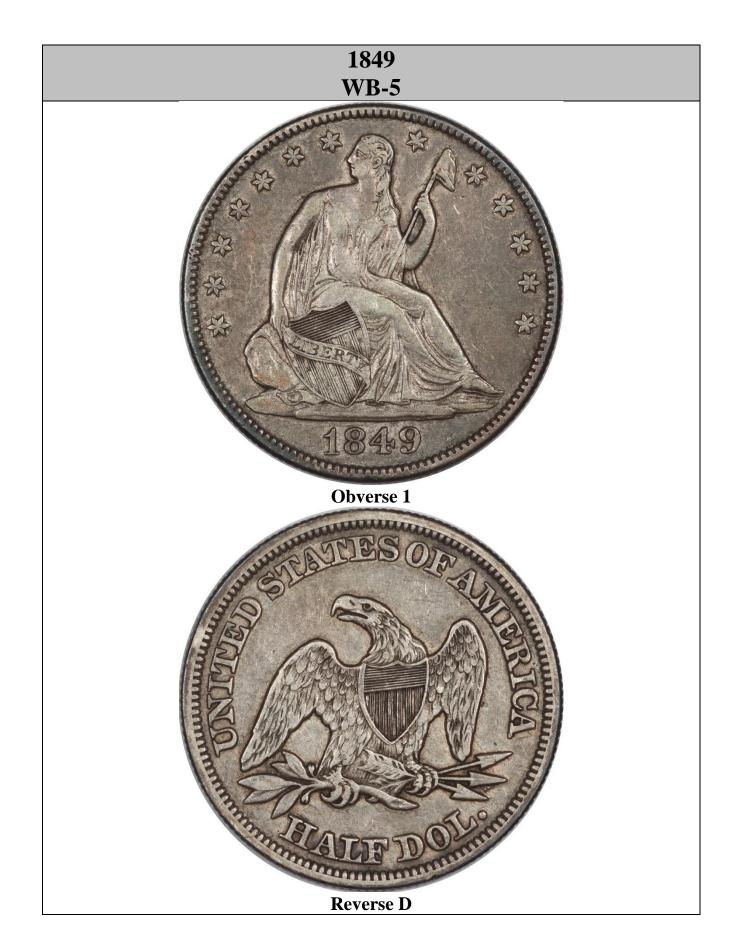
• Multiple die lines from the eagle's left wing to olive leaf #3 (photo)



 Small diagonal die line in the dentils above (UN)IT(ED) (photo)

This is the third	use of this obvers	e die and first u	ise of this revers	e die

Date grid: L5.5, .018"	5.5, .018" 145 reeds		Typical di	ameter = 1.198"	Rarity - 3
Drapery die state: Full	ate: Full Foot support: Full		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: XF40			Coin from the Bill Bu	gert Collection	
Cross reference: WB-101.					Version 82.S



# 1849 WB-6, Dramatically Doubled Date

Obverse 3

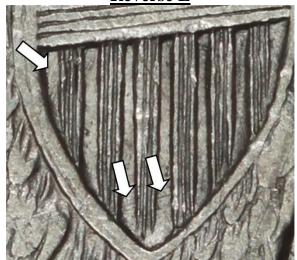


• Dramatically doubled date (photos above and below) with all the digits of the date first punched to the west of the final date.

Additionally, the lower loop of an errant 9 protrudes from the rock support above (18)49. Note also the tine from the dentil below the right edge of the 9.



Reverse E

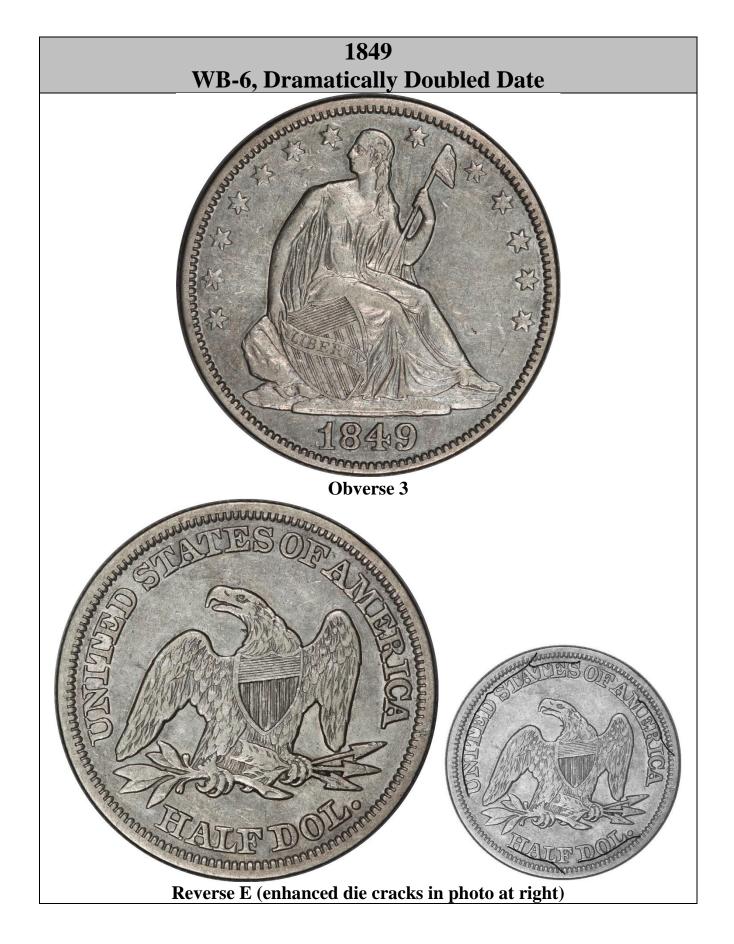


- Diagonal die lines in the upper left corner of the lower shield and other die lines in the bottom inside of the lower shield (photo)
- All examples seen: weak die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and first use of this reverse die.

This die marriage is a naked eye rarity, popular, and a key variety in the series. It has one of the most dramatically repunched dates; hence, the nickname. Most are seen in low grades but a small number exist in nice AU. Finding one of these in any condition would be a centerpiece of a Liberty Seated half dollar collection.

Date grid: M1, .018"	Date grid: M1, .018" 145 reeds		Typical di	ameter = 1.201"	Rarity - 5
Drapery die state: Full	Drapery die state: Full Foot support: Fu		ull	Dentils: Obverse - Fu	ll; Reverse - Full
Grade of coin depicted: XF40			Coin from the Bill Bu	gert Collection	
Cross reference: WB-102.					Version 82.S



#### **Obverse 4**



• Date (photo)

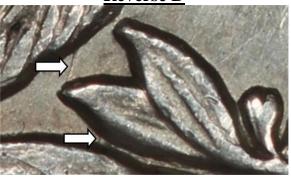


• Thin die line in the rock support below the foot (photo)



• Die line thru the dentils above Liberty's head (photo)

### Reverse D



Most of the die lines from the eagle's left wing to olive leaf #3 seen in the previous use of this die (WB-5) are not now visible. One strong line from the tip of olive leaf #4 and a few partial lines are visible (photo).



- Small diagonal die line in the dentils above (UN)IT(ED) (photo)
- All examples seen: die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the first use of this obverse die and second use of this reverse die.							
Date grid: M1.5, .018"	M1.5, .018" 145 reeds Ty			ameter = 1.202"	Rarity - 4		
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: A					Wiley Collection		
Cross reference: WB-101.					Version 82.S		







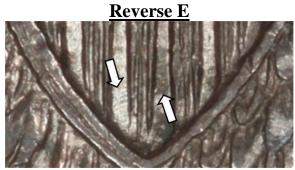
Date (photo)



 Thin die line in the rock support below the foot (photo)



• The die line thru the dentils above Liberty's head seen in the previous use of this die (WB-7) is now hidden by rim crumbling (photo).



- Die lines in the bottom inside of the lower shield (photo)
- All examples seen: weak die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the second use of this obverse die and second use of this reverse die.								
Date grid: M1.5, .018"	145 reeds Typ			ameter = 1.206"	Rarity - 4			
Drapery die state: Full Foot support: F			ull	Dentils: Obverse - Fu	ll; Reverse - Full			
Grade of coin depicted: X	F45			Coin from the Randy	Wiley Collection			
Cross reference: WB-101.					Version 82.S			



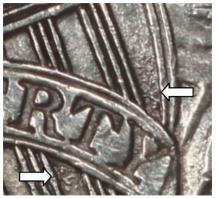
## 1849 WB-9, Doubled Date

Obverse 5



 Doubled date slants slightly down to the right with the final date punched obliquely over the first date, the repunched 1 being the most obvious (photos above and below)





- Rust lumps in the recessed areas of the shield (photo) and on Liberty's skirt to the right of the shield
- LDS only: clash in the field to the right of Liberty's drapery
- Bounce doubling often seen on this obverse.

#### **Reverse F**

- No usable die diagnostics seen other than die cracks
- All examples seen: die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and first use of this reverse die.

Date grid: M1.5, .018"	145 reeds		Typical diameter = 1.204"		Rarity - 3
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: MS60			Coin from the Randy	Wiley Collection	
Cross reference: WB-103.				Version 82.S	



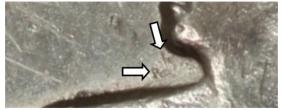
## 1849 WB-10, Errant 8 from Dentil

#### Obverse 6

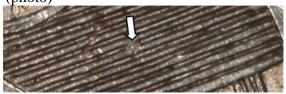


Date (photo) with a possible errant 8 from the dentil below the right side (1)8(49) (photo below)





Lumps and die lines under Liberty's chin (photo)



Lump in the center of the horizontal shield lines (photo)

Drapery die state: Full

Cross reference: WB-Unlisted.

#### Reverse F

- No usable die diagnostics seen other than die cracks
- All examples seen: die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and second use of this reverse die. Date grid: M1.5, .020" 145 reeds Typical diameter = 1.205"

Foot support: Full

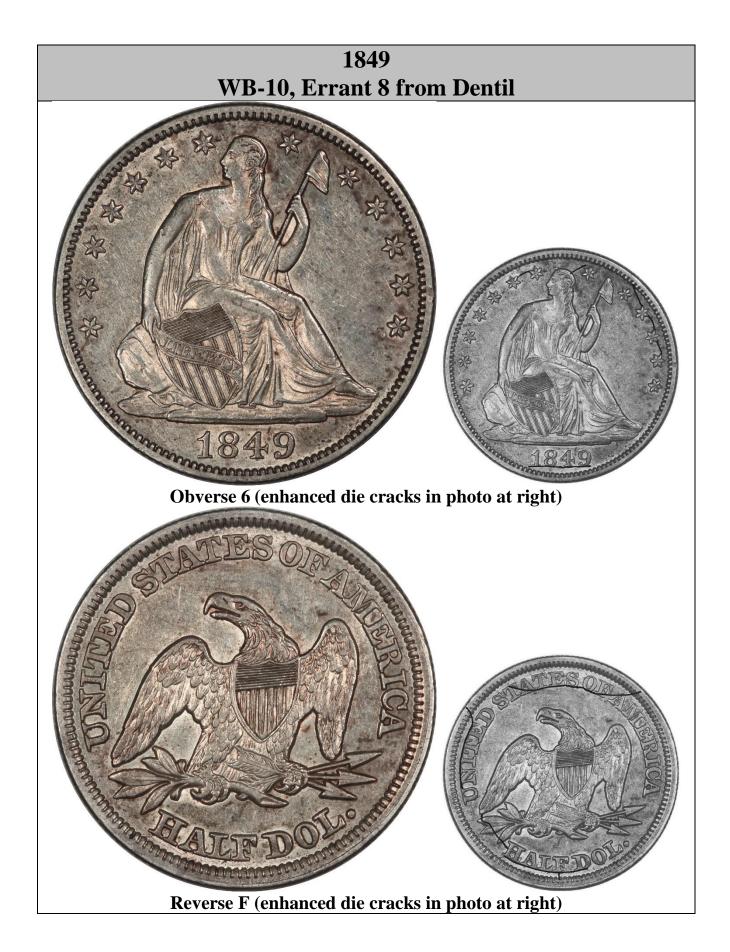
Grade of coin depicted: AU58, AU55, and PCGS AU55

Coins from the Randy Wiley and Bill **Bugert Collections** 

Dentils: Obverse - Full; Reverse - Full

Version 82.S

Rarity - 3

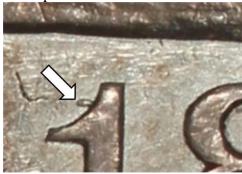


# 1849 WB-11, Repunched 1

Obverse 7



• Date (photo) with a remnant of the first punching of the 1 on the serif of the 1 (photo below). On VLDS examples, the repunching on the 1 is not visible but the die crack noted below is prevalent.



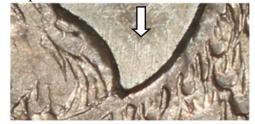
- Note: on other obverse dies identified with a tine on the 1, this remnant may appear similar but is different because it is much stronger and more like a repunched digit.
- Strong bounce doubling is typical especially on the date for this obverse die and should not be confused with digit repunching.
- LDS-VLDS only: die crack from rim at K-7 thru rock support to rock. (See enhanced die crack diagram on the next page.)

This is the only year of this absence die and only year

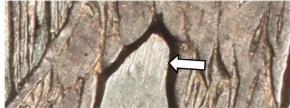
Reverse G



 EDS-LDS: many parallel diagonal (NE to SW) die lines in the recessed area of the lower shield (photo). Not visible on VLDS examples.

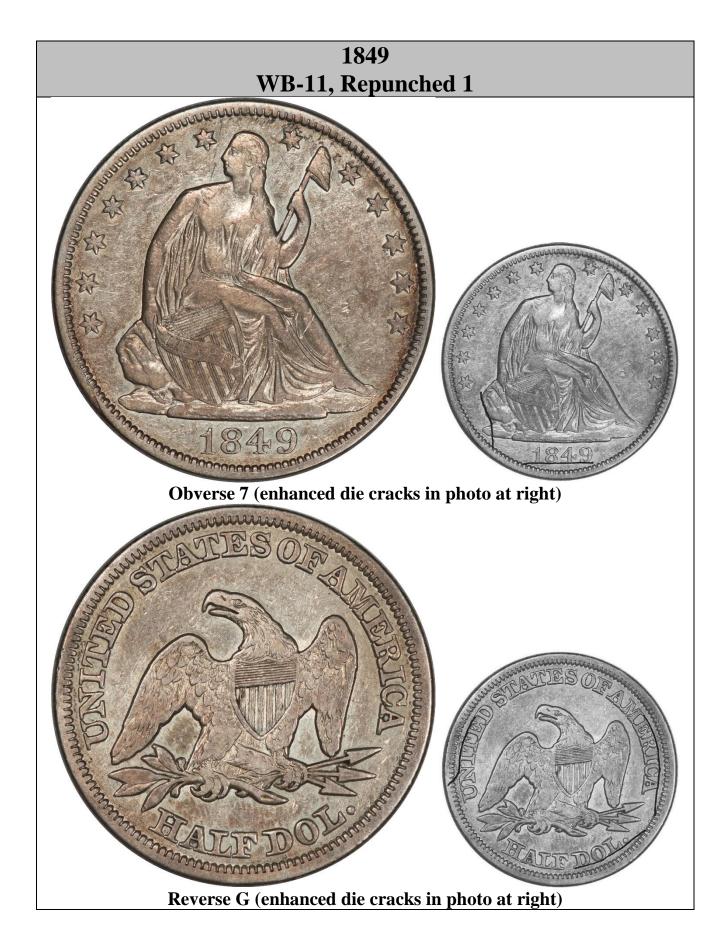


• EDS-LDS: many parallel die lines in the crotch of the eagle's neck and right wing (photo above) and in the crotch of the eagle's right leg and right wing (photo below). Not visible on VLDS examples.



 All examples seen: die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the only use of this	ODV	erse die and only	use of this	reverse die.	
Date grid: M2, .020"	145 reeds		Typical diameter = 1.207"		Rarity - 3
Drapery die state: Full	Foot support: I		'ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: VF35			Coin from the Bill Bu	gert Collection	
Cross reference: WB-104.				Version 82.S	



#### Obverse 8



• Date (photo)

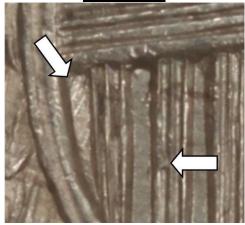


• XF+ examples only: lump on Liberty's stomach (photo). Two side-by-side lumps on the rock support at the shield tip; another lump on Liberty's hemline (photo below).



Attributing lower grade (VF and below)
 examples of this obverse die will be
 challenging; the date position will be the only
 clue.

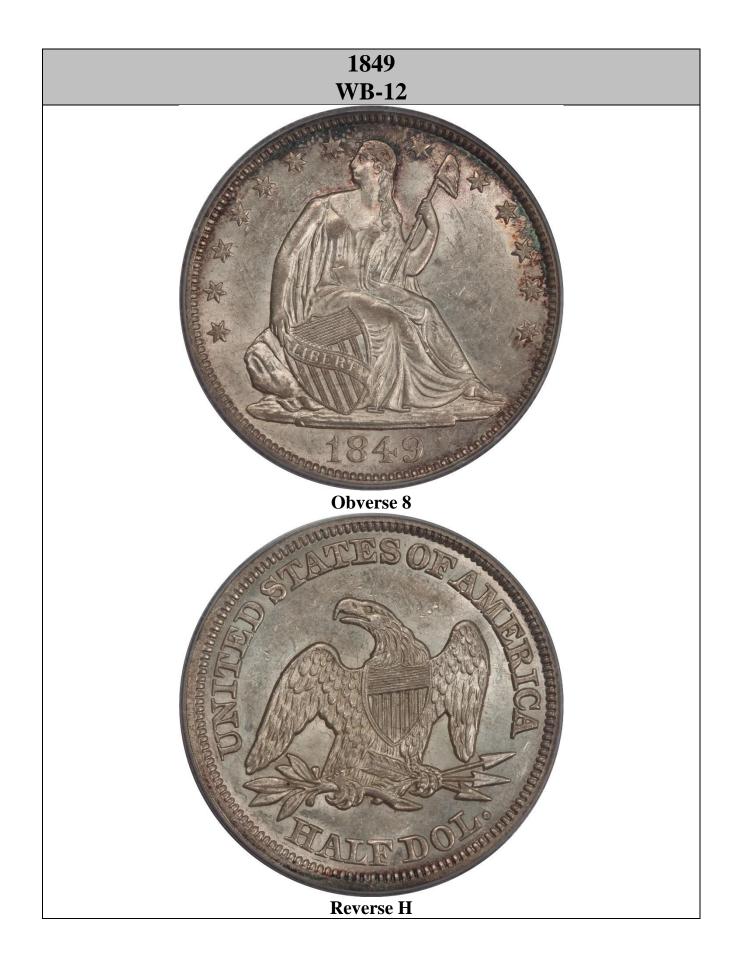
### Reverse H



- Diagonal die lines in the upper left corner of the lower shield area and lump on the middle of shield lines B1-2 (photo)
- Unfinished under the olive leaves

This is the only use of this	obverse die and only	use of this reverse die.

Date grid: M1, .020"	145 reeds		Typical diameter = 1.202"		Rarity - 3
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PCGS AU58			Coin from the Dick O	sburn Collection	
Cross reference: WB-101.					Version 82.S

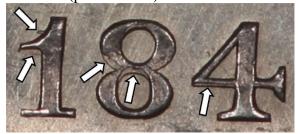


# 1849 WB-13, Repunched 184

Obverse 9



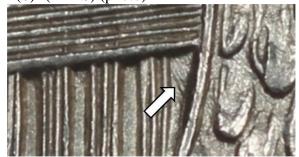
Date (photo) slants down to the right with the digits 184(9) repunched. The 18 is heavily doubled north while the 4 has slight doubling north along the lower edge of the crossbar.
 The 1 also has a small tine to the upper left of the serif (photo below)



Reverse I

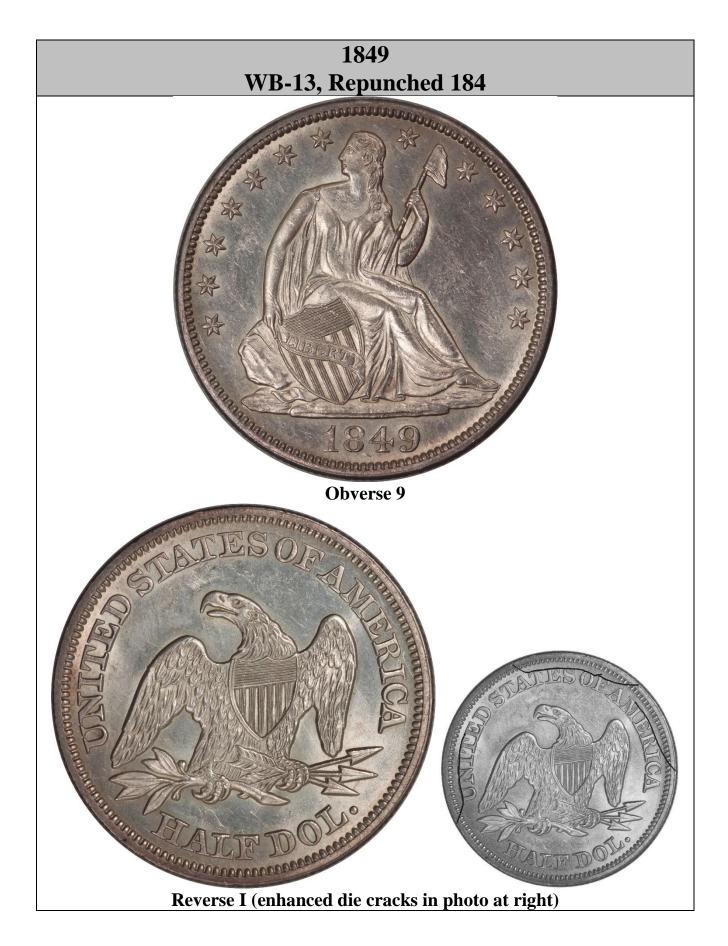


 Small rust lumps from the dentils above (S)T(ATES) (photo)



- Diagonal (NW to SE) die lines in the upper right corner of the lower shield (photo)
- All examples seen: die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.						
Date grid: M2.5, .020" 145 reeds Typ			Typical di	ameter = 1.202"	Rarity - 4	
Drapery die state: Full Foot suppo		Foot support: F	ot support: Full Dentils: Obverse - Fu		ll; Reverse - Full	
Grade of coin depicted: MS61				Coin from the Randy	Wiley Collection	
Cross reference: WB-106.					Version 82.S	



Obverse 10



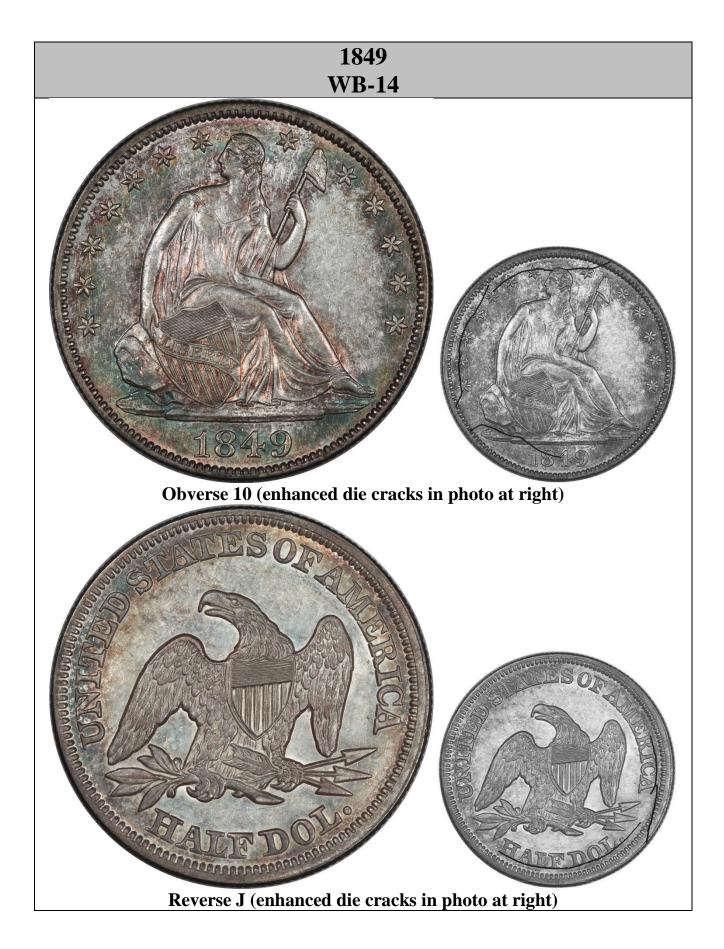
- Date (photo)
- Strong bounce doubling is typical especially on the date for this obverse die and should not be confused with digit repunching.
- All examples seen: die cracks thru stars 1-8, head, and cap and diagonally thru the date. (See enhanced die crack diagram on the next page.)

### Reverse J



- Triangular shaped raised metal under the eagle's right wing (photo)
- All examples seen: die cracks thru legend and denomination. (See enhanced die crack diagram on the next page.)

This is the only use of this obverse die and only use of this reverse die.						
Date grid: M1, .025" 145 reeds Ty			Typical di	ameter = 1.203"	Rarity - 3	
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: AU58				Coin from the Randy	Wiley Collection	
Cross reference: WB-101.					Version 82.S	



Obverse 11



• Date slanting down to the right (photo)

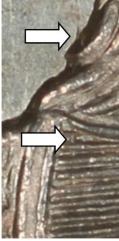


• Tine shaped die line from the dentil below Liberty's foot (photo)

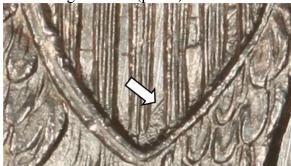


- Rust patch on Liberty's left arm below the elbow (photo above left) and another along the pole by Liberty's right arm (photo above right). Unfinished die/rust around the circumference by the dentils from K-8 to K-10
- Star 1 has rust splotches and die lines around the star points.





 Vertical die lines, perhaps the extended vertical shield lines, from the shield into/out of the eagle's neck (photo)



- Prominent diagonal die line in the lowest part of the shield (photo); other less prominent die lines higher in the shield.
- Clash in shield's lower right
- All examples: die cracks thru legend. (See enhanced die crack diagram on the next page.)
- This reverse die is transitional with 1848 (Reverse D).

This is the only use of this obverse die and only use of this reverse die.

Date grid: M1, .016"	145 reeds		Typical diameter = 1.204"		Rarity - 4
Drapery die state: Full	Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: MS62 and AU50 (LDS)			Coins from the Randy	Wiley Collection	
Cross reference: WB-101.				Version 82.S	



#### 1850

This is one of the better dates in the Liberty Seated half dollar series. With a lower mintage, most examples are found in high grade (AU+) with full strikes. Heavily circulated examples, likely repatriated years after the American Civil War from use in Canada or Latin America, are quite uncommon. With four die marriages known for 1850 including a repunched 0 in the date, all are easily distinguishable.

Even though various references note open and closed 5 in the date, all date punches were of the same logotype style; slight variations in the opening of the 5 are due to die polishing and die wear and are not due to variations in logotype style.

Four die marriages are known as depicted in the tables below.

Mintage	Number of Die Marriages			Reed Counts Known
277,000	4	3	3	1 (145)

#### 1850 date grid quick reference table

Obverse die date grid	Die Marriage
L5, .020"	WB-3
M1, .010"	WB-1
M1, .012"	WB-2
M1, .018"	WB-4

#### 1850 Half Dollar Date Positions



Obverse 1, WB-1, 2 Repunched 0

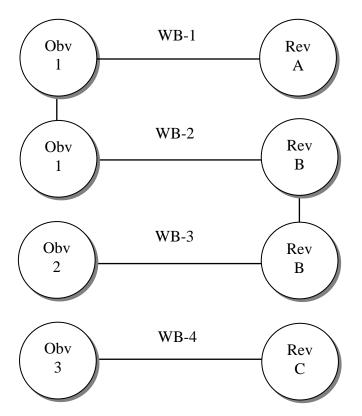


Obverse 2, WB-3



Obverse 3, WB-4

# 1850 Half Dollar Die Linkage Diagram



1850 Obverse and Reve die identification keys		Die lines in inside lower shield thru C1-3 and D1-3.	Distinctive die crack thru D ST	Distinctive die crack thru D ST
		A	В	C
Repunched 0	1	WB-1	WB-2	
Date left	2		WB-3	
Rusty die	3			WB-4

## 1850 WB-1, Repunched 0

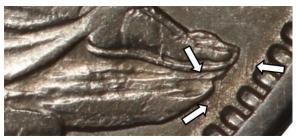
Obverse 1



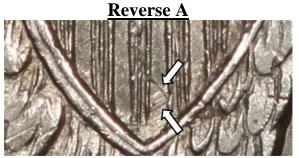
• Date (photo) with the (185)0 repunched northwest (photo below). Close scrutiny of the remaining digits shows minimal



repunching north (see repunching on the flag of the 5 at left) that fades quickly with advancing die state.



• Diagonal (NE to SW) die line in rock support from Liberty's sandal (photo). Other die lines at each end of the rock support (photo of right end above).



Crisscrossing die lines in the inside lower shield between and thru vertical die lines C1-3 and D1-3 (photo). Others in the lower shield's upper right.



• Die line in the crotch under the eagle's right wing (photo)

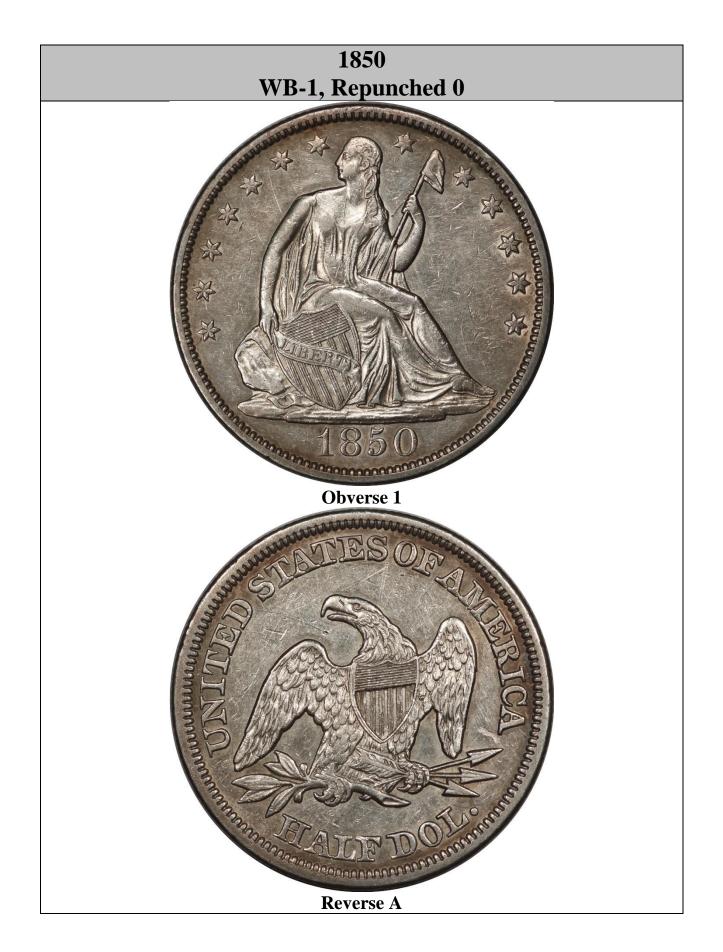


- Extra metal on the inside lower serif of the (AME)R(ICA) (photo)
- This reverse die is transitional with 1851 (Reverse A).

This is the first use of this obverse die and only use of this reverse die.

I have not seen die cracks on this die marriage.

Date grid: M1, .010"	145 reeds		Typical diameter = 1.203"		Rarity - 4	
Drapery die state: Full Foot support		Foot support: F	Full Dentils: Obverse - Ful		ll; Reverse - Full	
Grade of coin depicted: AU53				Coin from the Bill Bugert Collection		
Cross reference: WB-102.					Version 82.S	



### 1850 WB-2, Repunched 0

Obverse 1



 Date right (photo) with the (185)0 repunched northwest only on EDS coins (photo below left).
 LDS: the repunching is not now visible (photo below right).







 Diagonal (NE to SW) die line in rock support from Liberty's sandal (photo). The die lines seen at each end of the rock support on the previous use of this die (WB-1) are not now visible. Reverse B

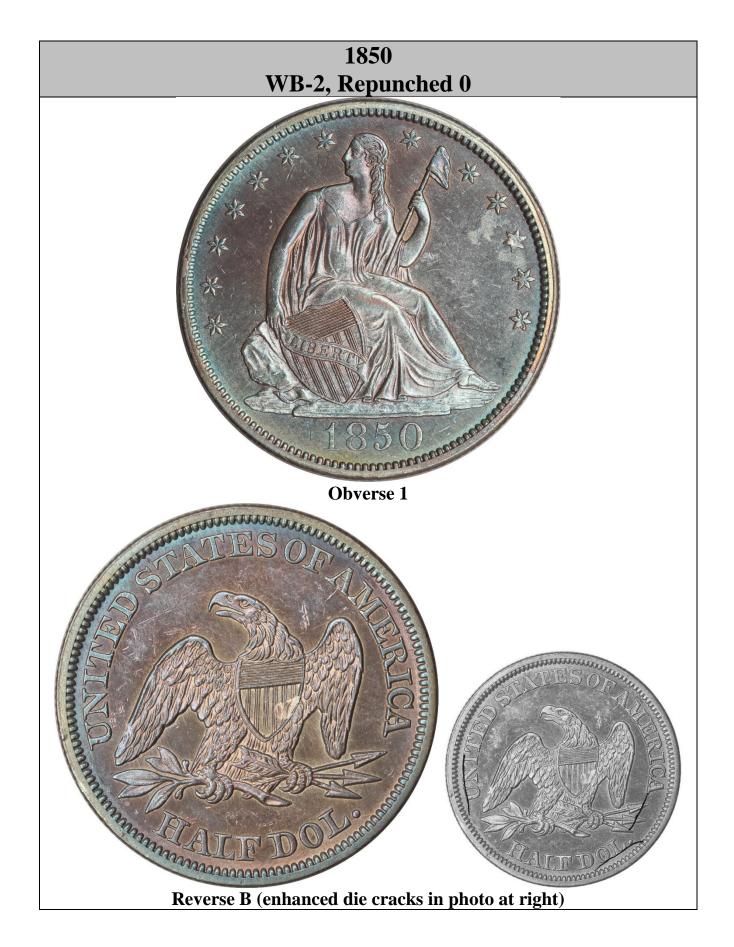


EDS: uncracked, LDS: several die cracks thru the legend and denomination; distinctly, an arching die crack from dentils along the base of (D)OL. as shown (photo). (See enhanced die crack diagram on the next page.)



• All die states: massive die clash in the shield's lower right (photo)

This is the second use of this obverse die and first use of this reverse die.					
Date grid: M1, .012"	14	5 reeds	Typical diameter = 1.203"		Rarity - 3
Drapery die state: Full Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: EDS - AU50, LDS - AU58			Coins from the Randy Wiley Collection		
Cross reference: WB-102.				Version 82.S	

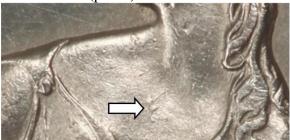


#### 1850 WB-3

#### Obverse 2



Date far left (photo)



Small lumps on Liberty's upper chest (photo).
 Since most 1850s are high grade, this will likely be visible on many examples of this die marriage.



 Die line from the rock support below Liberty's foot (photo)





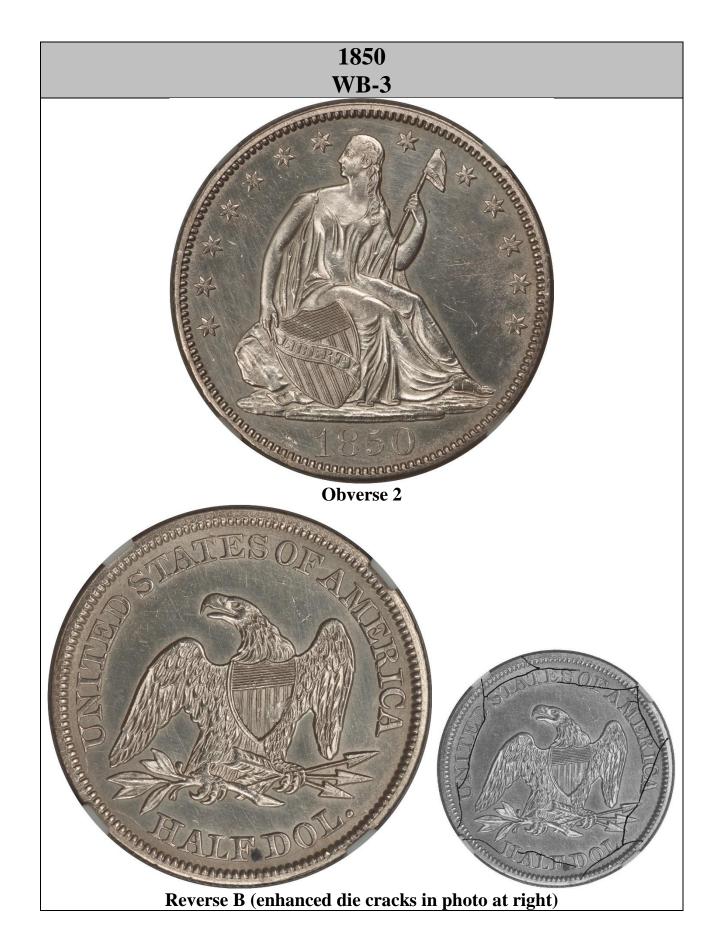
Multiple die cracks thru the entire legend and denomination; distinctive arching die crack from dentils along the base of (D)OL as shown (photo). (See enhanced die crack diagram on the next page.)



• Massive triple die clash in the shield's lower right (photo)

This is the only use of this	obverse die and seco	nd use of this reverse die.

Date grid: L5, .020"	145 reeds		Typical diameter = 1.204"		Rarity - 3
Drapery die state: Full	Foot support: 1		ull	Dentils: Obverse - Full; Reverse - Ful	
Grade of coin depicted: No	rade of coin depicted: NGC AU58			Coin from the Dick O	sburn Collection
Cross reference: WB-101.					Version 82.S

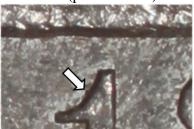


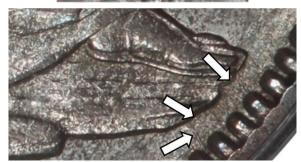
#### 1850 WB-4

#### Obverse 3



• Date (photo) with a small tine on upper left of the serif of the 1 (photo below)





- Die lines between the rock support and the dentils below Liberty's foot (photo)
- Very rusty die with rust lumps or possibly die acid etching on the obverse devices





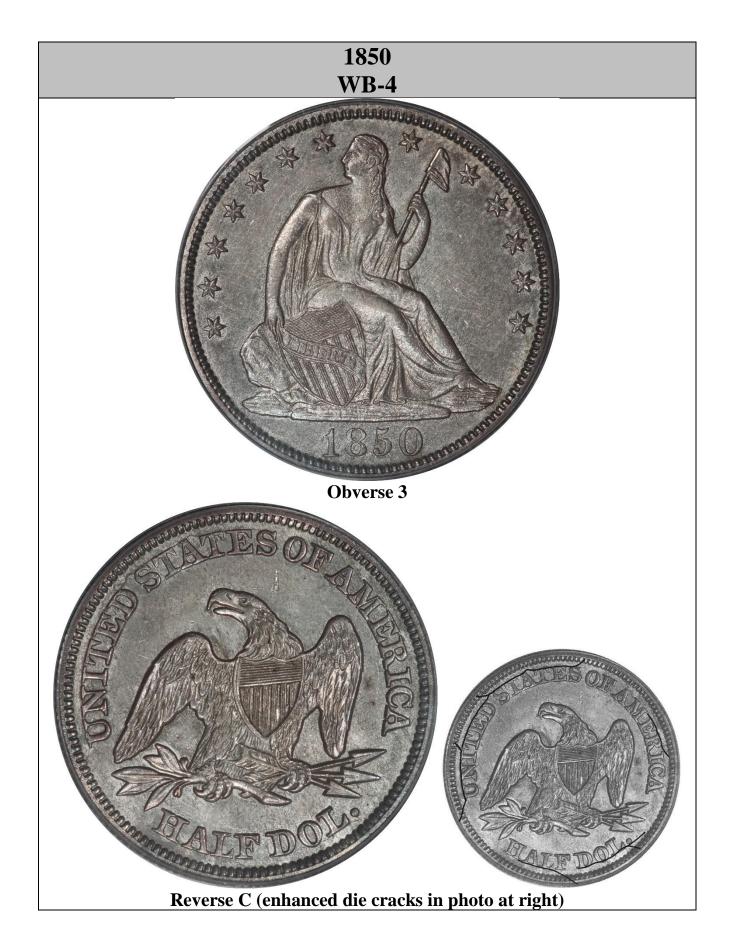
Two diagonal lines in the shield's inside lower center (photo)



- Multiple die cracks thru the legend and denomination; distinct crack thru (UNITE)D ST(ATES) as shown (photo). (See enhanced die crack diagram on the next page.)
- "Hole" in upper vertical shield lines A1-3
- Weak clash in shield lower right

TPL: - : - 41 1-	C 41-:-	-1	.1 1	41
Inis is the oni	vuse of this	obverse die an	a oniy use oi	this reverse die.

Date grid: M1, .018"	145 reeds		Typical diameter = 1.207"		Rarity - 3	
Drapery die state: Full Foot support: F		ull	Dentils: Obverse - Full; Reverse - Full			
Grade of coin depicted: PCGS AU55			Coin from the Bill Bugert Collection			
Cross reference: WB-101.					Version 82.S	



#### 1851

1851 is one of the better dates in the Liberty Seated half dollar series. Very popular among collectors, this date has an instant attraction. With a low mintage, most examples are found in high grade (AU+) with full strikes. Heavily circulated examples, likely repatriated years after the American Civil War from use in Canada or Latin America, are very rare. Often thought to be rare, it is an underrated date but examples are available at a fair price.

Eight die marriages are known with normal and repunched dates and a digit in the dentils but a few will prove to be very difficult to find. All die marriages are die linked with sufficient die diagnostics to ease attribution.

Even though various references note open and closed 5 in the date, all date punches were of the same logotype style; slight variations in the opening of the 5 are due to die polishing and die wear and are not due to variations in logotype style.

Eight die marriages are known as depicted in the tables below.

Mintage	Number of	Obverse	Reverse	Reed Counts
	Die Marriages	Dies	Dies	Known
200,750	8	4	5	1 (145)

#### 1851 date grid quick reference table

Obverse die date grid	Die Marriage
L3, .014"	WB-4
L3.5, .014"	WB-5
L4.5, .012"	WB-8
M1, .015"	WB-6
M1, .015"	WB-7
M2, .016"	WB-1
M2.5, .018"	WB-2
M2.5, .018"	WB-3

Dick Osburn pioneered the advanced study of the die marriages of this date with his article "Die Marriages for 1851 Half Dollars" in *Gobrecht Journal* Isssue#80, March 2001. Detailing eight die marriages, he drastically increased interest in this date; no other die marriages have been found since his study.

#### **1851 Half Dollar Date Positions**



Obverse 1, WB-1, 2, 3 Repunched 2<sup>nd</sup> 1



Obverse 2, WB-4, 5 Repunched 18



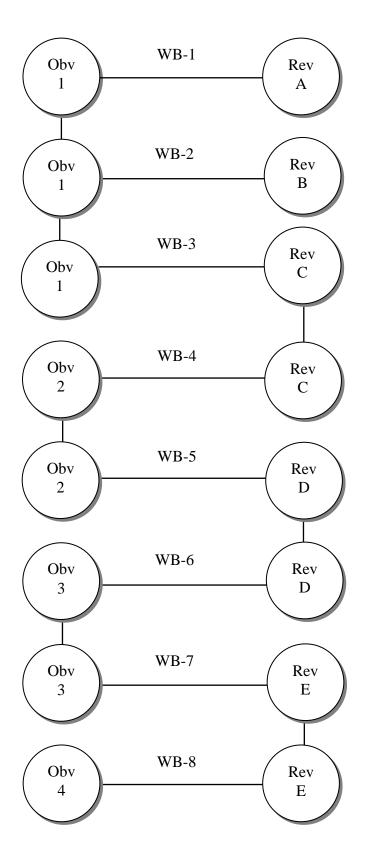
Obverse 3, WB-6, 7



Obverse 4, WB-8 Errant 8 in Dentils

1851 Obverse and Rever die identification ko	Diagonal die line in the lower shield	Many vertical lines extend thru the horizontal shield lines into the eagle's neck	Nearly horizontal die lines in the lower shield	Diagonal die lines from the dentils above UNITEL	Many diagonal die lines ir the lower shield	
		A	В	C	D	${f E}$
Repunched 2 <sup>nd</sup> 1	1	WB-1	WB-2	WB-3		
Repunched 18	2		-	WB-4	WB-5	
Normal date	3				WB-6	WB-7
Errant 8 in dentils	4					WB-8

# 1851 Half Dollar Die Linkage Diagram



## 1851 WB-1, Repunched 2<sup>nd</sup> 1

**Obverse 1** 

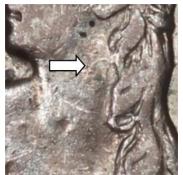


• Date right (photo) with the remnant of the top of a 1 to the upper left of the serif of the second 1 (photo below right). Small tine on the serif of the first 1 (photo below left).





 Curved lint marks on Liberty's neck (photo above right). As most 1851s are seen in high grade, these lint marks will likely be visible.

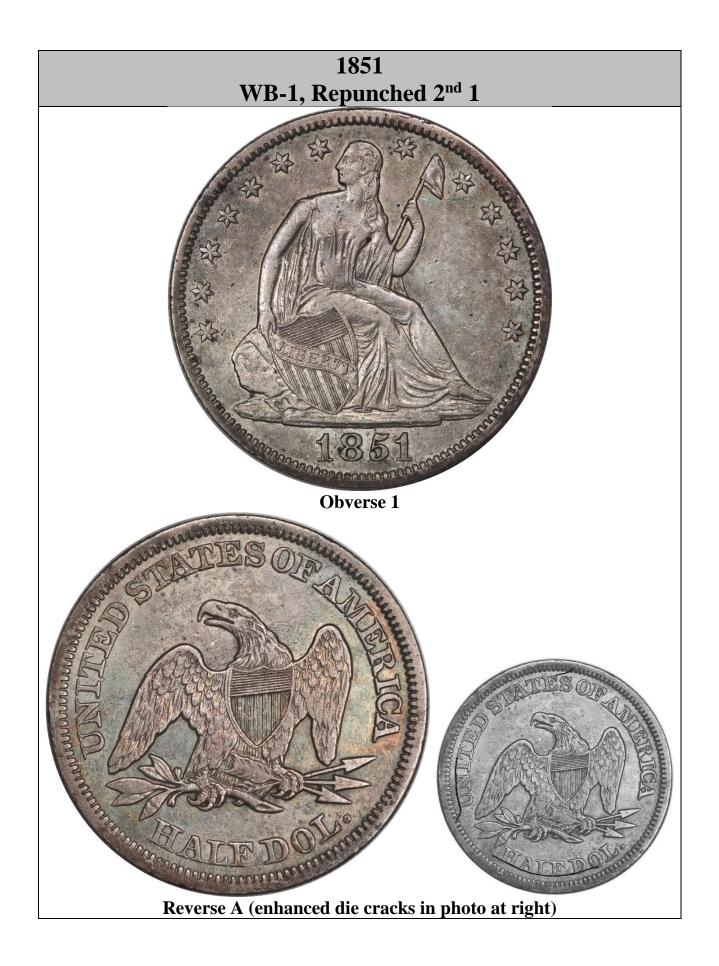


 LDS: looping die crack along the base of the date

- Reverse A
- Diagonal (NW to SE) die line in the center lower recessed area of the shield (photo)
- This reverse die is transitional with 1850 (Reverse A).
- See enhanced die crack diagram on the next page.

This is the first use of this obverse die and only use of this reverse die.

Date grid: M2, .016"	14	5 reeds	Typical diameter = 1.207"		Rarity - 4	
Drapery die state: Full		Foot support: F	'ull	De	ll; Reverse - Full	
Grade of coin depicted: X	F45			Co	in from the Randy	Wiley Collection
Cross reference: WB-101, Osburn Obverse 3 and Reverse				E.		Version 82.S



### 1851 WB-2, Repunched 2<sup>nd</sup> 1

Obverse 1



• Date right (photo) with the remnant of the top of a 1 to the upper left of the serif of the second 1 (photo below left). Note: the doubling on the date seen in the images here is not date repunching but bounce doubling (typical for 1851) and does not merit a premium.





- Curved lint marks on Liberty's neck (photo at right). As most 1851s are seen in high grade, these lint marks will likely be visible.
  - Multiple clash marks
    in the field to the right of Liberty's elbow
- Looping die crack along the base of the date and thru the stars and Liberty's head. (See enhanced die crack diagram on the next page).

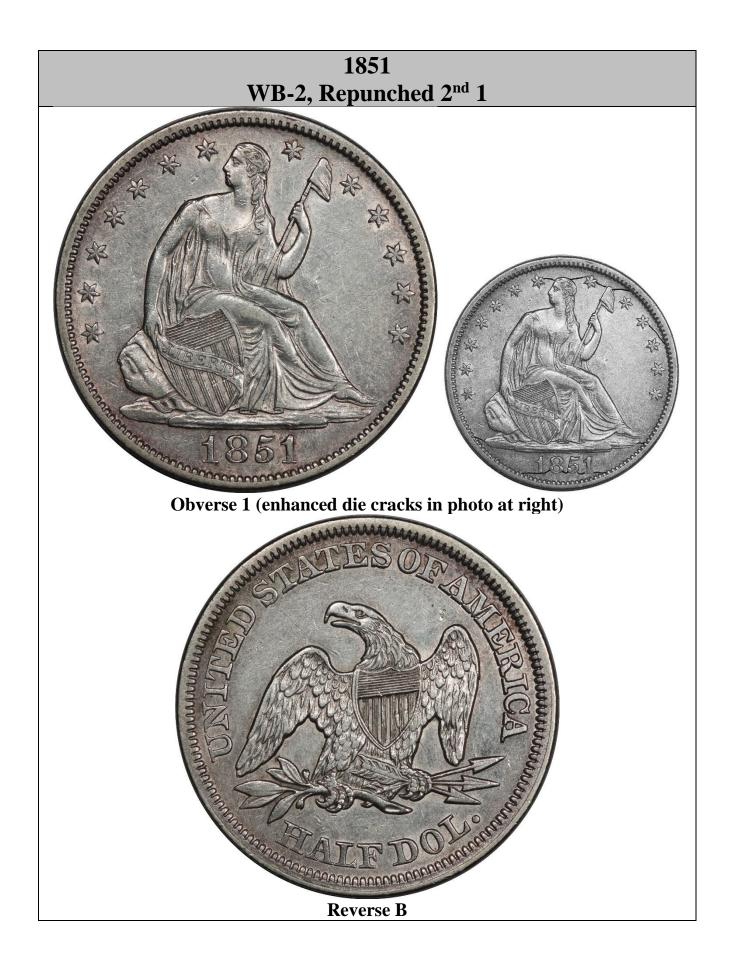




- Many vertical lines extend thru the horizontal shield lines into the eagle's neck (photo)
- Partial "hole" in upper vertical shield lines A1-3 (visible in photo above)
- Clash in shield's lower right

This is the second use of this obverse die and only use of this reverse die.

Date grid: M2.5, .018"	14	145 reeds Typical di		ameter = 1.206"	Rarity - 4
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: AU	53			Coin from the Bill Bu	gert Collection
Cross reference: WB-103, C	Sbu	rn Obverse 3 and	Reverse B.		Version 82.S



## 1851 WB-3, Repunched 2<sup>nd</sup> 1

Obverse 1



• Date right (photo) with the remnant of the top of a 1 to the upper left of the serif of the second 1 (photo below right). Small tine on the serif of the first 1 (photo below left).





 Curved lint marks on Liberty's neck (photo at right).
 As most 1851s are seen in



high grade, these lint marks will likely be visible.

 Looping die crack along the base of the date. (See enhanced die crack diagram on the next page).





Many nearly horizontal die lines in the lower shield (photo)



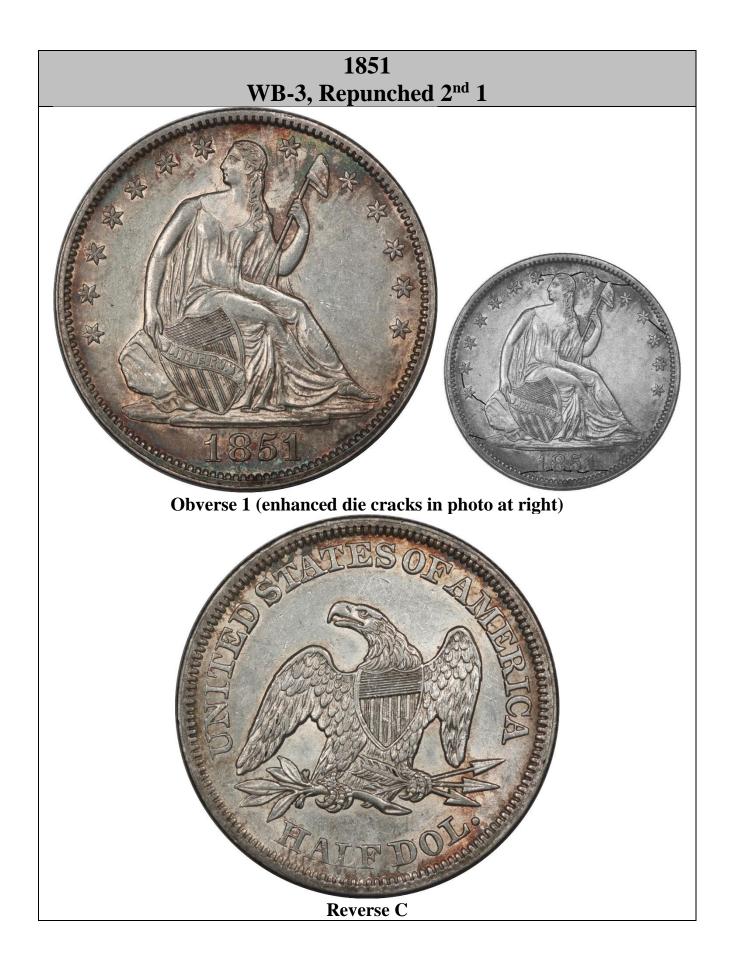
 Die lines above and below the eagle's right claw (photo)



• Small die line in the dentils between (HALF)F D(OL) (photo)

Grade of coin depicted: AU55 Coin from the Randy Wiley Collection

Cross reference: WB-103, Osburn Obverse 3 and Reverse C. Version 82.S



## 1851 WB-4, Repunched 18

Obverse 2

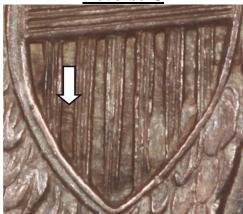


• Date far left (photo) with the digits 18(51) slightly repunched south (photo below)



• Lines in shield above the scroll and Liberty's gown

Reverse C



Nearly horizontal die lines in the lower shield (photo)



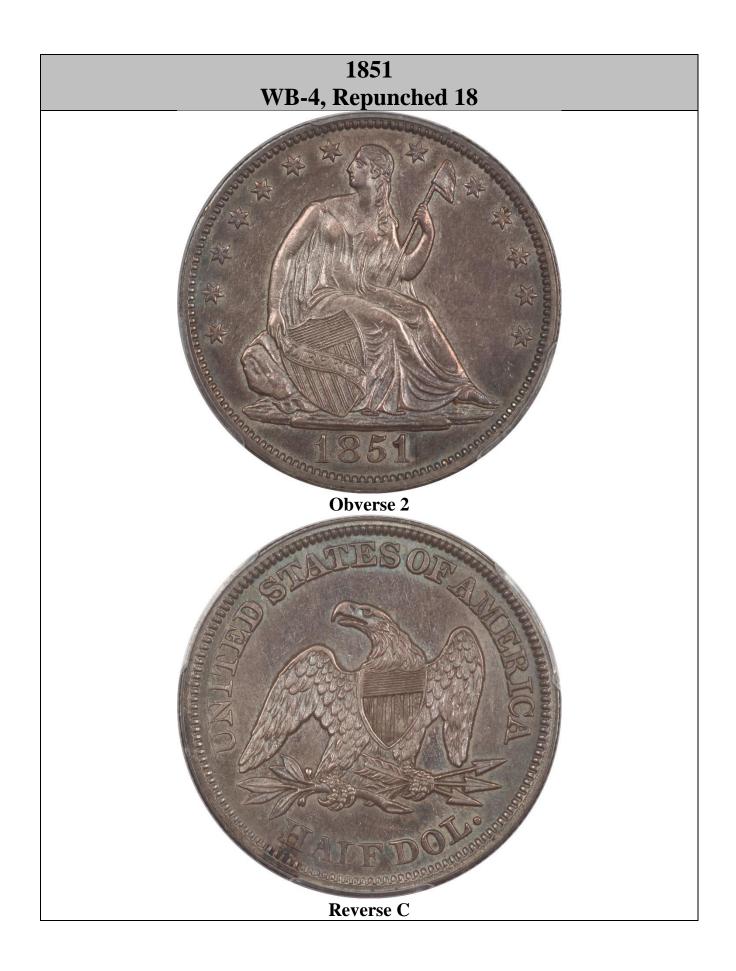
• Small die line in the dentils between (HALF)F D(OL) (photo)



• Small tine along the edge of the eagle's wing (photo). Other die lines above and below the eagle's right claw as seen on WB-3.

TC1 : .1 C:	C .1 .	1 1'	1 .	1 6.1 1 11	
Thic ic the first lice	Of thic	Chuerce die an	d second	l use of this reverse di	Δ
	OI UIIS	onverse die an	u secone	i use of this reverse ur	U.

Date grid: L3, .014" 145 reeds		Typical dia	ame	ter = 1.207"	Rarity - 4	
Drapery die state: Full Foot support: I		ull	Dentils: Obverse - Full; Reverse - Full		ll; Reverse - Full	
Grade of coin depicted: Po	CGS	S AU53		Co	oin from the Dick O	sburn Collection
Cross reference: WB-102,	Osl	burn Obverse 2 ar	nd Reverse	C.		Version 82.S



## 1851 WB-5, Repunched 18

Obverse 2



• Date far left (photo) with the digits 18(51) slightly repunched south (photo below)





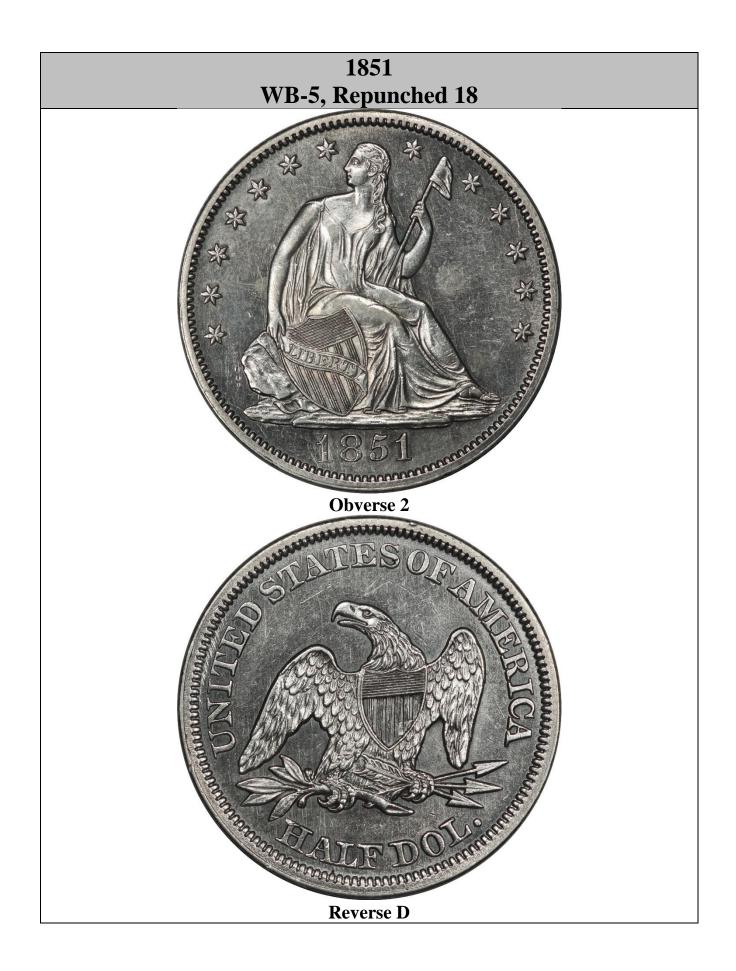
Reverse D



- Diagonal die lines from the dentils above (U)NITED (photo)
- LDS: clash in shield's lower right

• Lines in shield and Liberty's gown (photo)

This is the second use of this obverse die and first use of this reverse die.							
Date grid: L3.5, .014"	14	145 reeds Typical dian		ame	neter = 1.209" Rarity - 4		
Drapery die state: Full		Foot support: F	full	De	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: M	IS60	)		Co	in from the Randy	Wiley Collection	
Cross reference: WB-102, Osburn Obverse 2 and Reverse A. Version 82					Version 82.S		



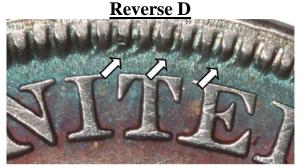
#### 1851 WB-6



• Date (photo) with a large rust lump on the first 1 near the serif (photo below). Note: the doubling on the date seen on this die marriage is not date repunching but bounce doubling (typical for 1851) and does not merit a premium.



 Arcing die crack from Liberty's nose to her shoulder. Other die cracks - see enhanced die crack diagram on the next page.



- Diagonal die lines from the dentils above (U)NITED (photo). These lines are much less prominent than on the previous use of this die (WB-5).
- Clash in shield's lower right



 VLDS only: die damaged and possibly attempted die repair to the A(MERICA) (photo)

		1 0					
This is the first use of this obverse die and second use of this reverse die.							
Date grid: M1, .015"	14	Typical diameter = 1.206"			ter = 1.206"	Rarity - 4	
Drapery die state: Full		Foot support: F	full	De	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: A	U58	3		Co	in from the Bill Bu	gert Collection	
Cross reference: WB-101,	, Os	burn Obverse 1 a	nd Reverse	A.		Version 82.S	



## 1851 WB-7

Obverse 3



• Date (photo) with a large rust lump on the first 1 near the serif (photo below)



• Arcing die crack from Liberty's nose to her shoulder. Other die cracks - see enhanced die crack diagram on the next page





 Many diagonal die lines in the lower shield (photo)



• Small rim cud below (HA)L(F) (photo) seen on all examples

This is the second use of this obverse die and first use of this reverse die.							
Date grid: M1.5, .015"	Ur	nknown reeds Typical diameter			ter = Unknown"	Rarity - 5	
Drapery die state: Full		Foot support: Full			Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: Po	CGS	S AU53		Co	in from the Dick O	sburn Collection	
1					Version 82.S		



## 1851 WB-8, Errant 8 in Dentils

#### Obverse 4



Date left (photo) with the top of an 8 in the dentils between (1)85(1) (photo below).
 Some examples seen have doubling on the date; this doubling is not date repunching but bounce doubling (typical for 1851) and does not merit a premium.





• Large lump in Liberty's lap (photo). Another large lump on Liberty's stomach (visible only on high grade coins) and other smaller lumps in the folds of Liberty's gown on her torso.

#### Reverse E



 Many diagonal die lines in the shield's lower recessed area (photo)

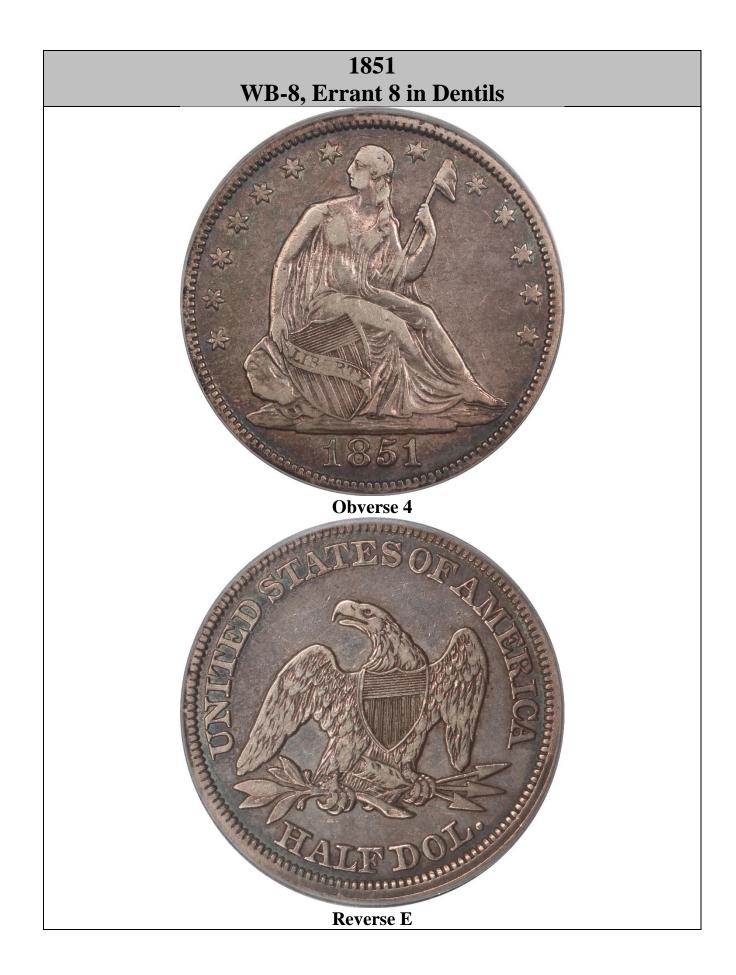


• Small rim cud below (HA)L(F) (photo) seen on all known examples

This is the only use of this obverse die and second use of this reverse die.

This die marriage is a series rarity; first identified in the Smithsonian on a National Numismatic Collection coin when I studied that collection in 1989, few have been seen since then. Most examples known are mid-grade with high grade (AU and higher) coins extremely rare.

Date grid: L4.5, .012"	14	5 reeds	Typical diameter = 1.208"		Rarity - 6	
Drapery die state: Full		Foot support: F	Gull Dentils: Obverse - Ful			ll; Reverse - Full
Grade of coin depicted: V	F30			Coi	n from the Bill Bu	gert Collection
Cross reference: WB-101,	Osl	ourn Obverse 4 aı	nd Reverse	D.		Version 82.S



#### 1852

As with all those of the very early 1850s, this is one of the better dates in the Liberty Seated half dollar series. With a low mintage, most examples are found in high grade (AU+) with beautiful full strikes. Heavily circulated examples, likely repatriated years after the American Civil War from use in Canada or Latin America, are very rare. With three die marriages known for 1852, all with the same obverse die, all are easily distinguishable.

Even though various references note open and closed 5 in the date, all date punches were of the same logotype style; slight variations in the opening of the 5 are due to die polishing and die wear and are not due to variations in logotype style.

Three die marriages are known as depicted in the tables below.

Mintage	Number of	Obverse	Reverse	Reed Counts
	Die Marriages	Dies	Dies	Known
77,130	3	1	3	2 (144, 145)

#### 1852 date grid quick reference table

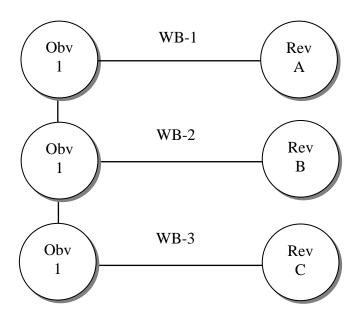
Obverse die date grid	Die Marriage
L4, .016"	WB-1
L4, .018"	WB-2
L4, .018"	WB-3

#### 1852 Half Dollar Date Position



Note: All three die marriages for this date use the same obverse die.

# 1852 Half Dollar Die Linkage Diagram



1852 Obverse and Reverse di	e	single clash in shields right; die line from dentil above R	l die line sin lower shield	Heavy double clash in shields lower right
identification keys		Heavy single lower right dentil	Diagonal	Heavy do shields
identification keys		. =	B Diagonal	Heavy shiel

## 1852 WB-1

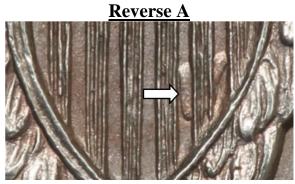
Obverse 1



• Date (photo)



 Horseshoe shaped lint mark on Liberty's left shin (photo)



• Single clash in the shield's lower right (photo). Note: this clash differs from that seen on WB-3.

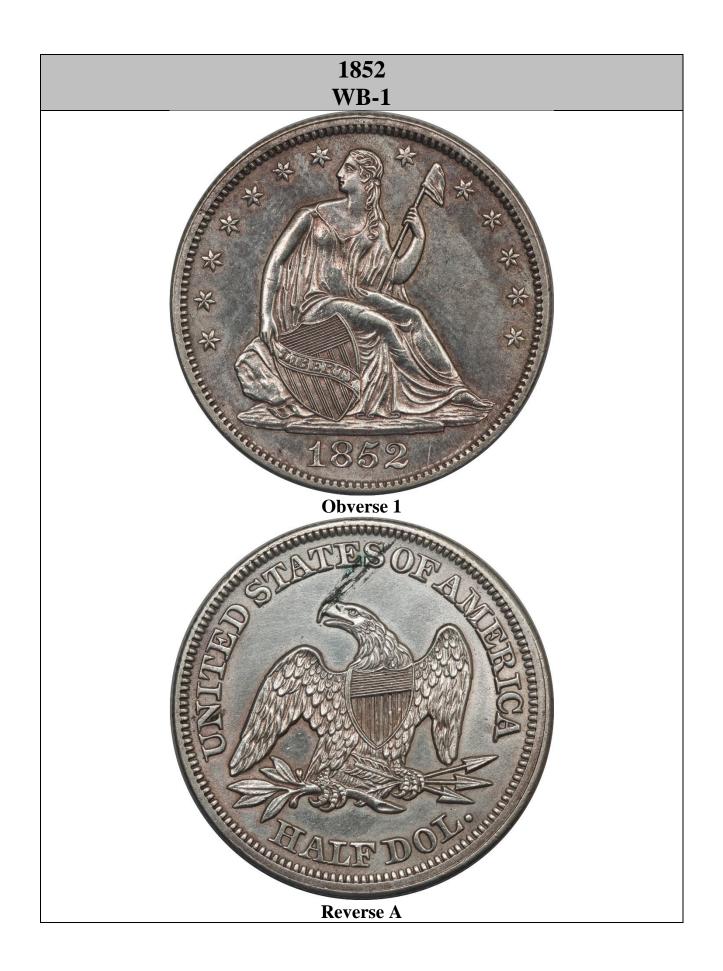


• Die line from the dentil above (AME)R(ICA) (photo)

This is the first use of this obverse die and only use of this reverse die.

I have not seen any die cracks on this die marriage or on any of the die marriages for 1852.

Thave not seen any die era	CKS	y of the the marriages i	01 1032.			
Date grid: L4, .016"	14	4 reeds	Typical di	ameter = 1.207"	Rarity - 4	
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Fu	Full; Reverse - Full	
Grade of coin depicted: M	IS61			Coin from the Randy	Wiley Collection	
Cross reference: WB-101.					Version 82.S	



## 1852 WB-2

Obverse 1



• Date (photo)



- Horseshoe shaped lint mark on Liberty's left shin (photo)
- Weak clash in the field to the right of Liberty's elbow

Reverse B



- Many diagonal (NE to SW) parallel die lines in the lower shield (photo)
- Clash in shield's lower right

This is the second use of this obverse die and only use of this reverse die.

I have not seen any die cracks on this die marriage or on any of the die marriages for 1852.

Date grid: L4, .018"	144 reeds		Typical diameter = 1.204"		Rarity - 4
Drapery die state: Full		Foot support: Full		Dentils: Obverse - Full; Reverse - Full	
Grade of coin depicted: PCGS AU58				Coin from the Bill Bugert Collection	
Cross reference: WB-101.					Version 82.S

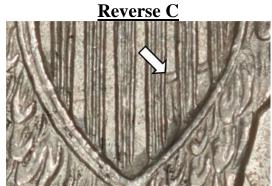


### 1852 WB-3

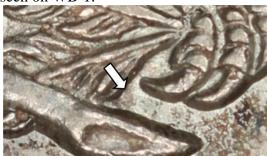
#### Obverse 1



• Date (photo)



• Double clash in the shield's lower right (photo). Note: this clash differs from that seen on WB-1.

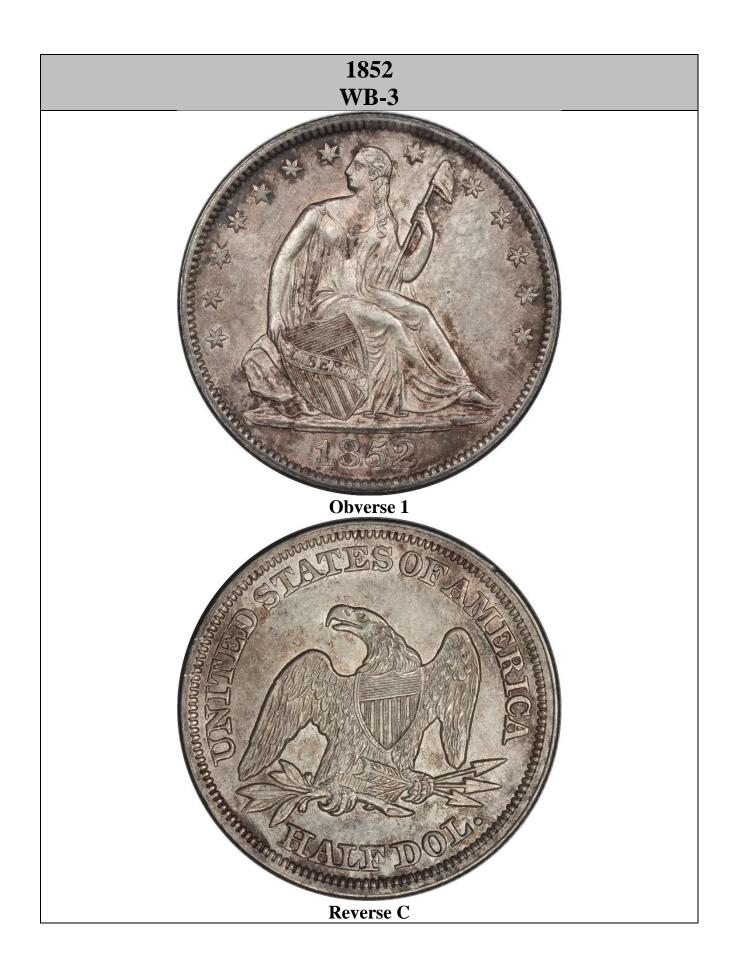


• Diagonal die line connects the tip of the eagle's talon and the olive stem (photo)

This is the third use of this obverse die and only use of this reverse die.

I have not seen any die cracks on this die marriage or on any of the die marriages for 1852.

Date grid: L4, .018"	145 reeds		Typical diameter = 1.209"		Rarity - 4	
Drapery die state: Full		Foot support: F	ull	Dentils: Obverse - Full; Reverse - Full		
Grade of coin depicted: MS60				Coin from the Randy Wiley Collection		
Cross reference: WB-101.					Version 82.S	



#### The 2015 Half Dollar Summit



In April 2015, for the fourth "Half Dollar Summit," Liberty Seated half dollar enthusiasts and Liberty Seated Collectors Club members (left to right in photo above) Dick Osburn, Randy Wiley, Bill Bugert, and John Murison gathered at the Bugert home in Gettysburg, PA for four full days of friendship, coin camaraderie, marathon coin research, and lots of food and drink. The primary purpose of this summit was to gather large collections of early date Philadelphia Mint Liberty Seated half dollars for study in preparation for my work on this Register. Their assistance was critical in completing this Register and I will never be able to thank them all enough.

Over 750 half dollars were studied as well as a large number of coins from other dates in the Liberty Seated half dollar series. Of note, Randy (with 1843s in photo at right; yes, those coins neatly organized on the table were all 1843 half dollars from our collections) worked on the 1843 and 1844 die emission sequencing for a few days while Dick, among other items, was interested in studying 1876 half dollars.



Everyone had a great time and promised to get together again soon.

# **Appendix A: Resources**

This appendix is not all inclusive of references used for this Register. Rather, it is meant to provide the Liberty Seated Half Dollar collector with a list of useful references to be used while collecting this series.

- Beistle, Martin Luther. <u>A Register of Half Dollar Die Varieties and Sub-Varieties</u>. Shippensburg, PA: The Beistle Company, 1929.
- Bowers, Q. David. A Guide Book of Liberty Seated Silver Coins. Atlanta, GA: Whitman Publishing, 2016.
- Breen, Walter. Walter Breen's Complete Encyclopedia of US and Colonial Coins. F.C.I Press, Inc. and Doubleday, 1988.
- Breen Walter. Walter Breen's Encyclopedia of United States and Colonial Proof Coins. New York: F.C.I. Press, Inc., 1977.
- Bugert, Bill. <u>A Register of Liberty Seated Half Dollar Varieties, Volume I, San Francisco Branch Mint.</u> Gettysburg, PA: Self-published, 2009.
- Bugert, Bill. <u>A Register of Liberty Seated Half Dollar Varieties, Volume II, Carson City Branch Mint.</u> Gettysburg, PA: Self-published, 2010.
- Bugert, Bill. A Register of Liberty Seated Half Dollar Varieties, Volume III, New Orleans Branch Mint 1840-O to 1853-O NA. Gettysburg, PA: Self-published, 2011.
- Bugert, Bill. <u>A Register of Liberty Seated Half Dollar Varieties, Volume IV, New Orleans Branch Mint 1853-O WA to 1861-O.</u> Gettysburg, PA: Self-published, 2013.
- Bugert, Bill. <u>A Register of Liberty Seated Half Dollar Varieties</u>, Volume V, Philadelphia Mint 1839 to 1852. Gettysburg, PA: Self-published, 2016.
- Burdette, Roger W. from Mine to Mint. Great Falls, VA: Seneca Mill Press, 2013.
- Carothers, Neil. Fractional Money. New York: John Wiley & Sons, 1930.
- Cooper, Dennis R. <u>The Art and Craft of Coinmaking A History of Minting Technology</u>. London: Spink & Son, 1988.
- The Gobrecht Journal Collective Volume I, First Edition, LSCC, 1980.
- The Gobrecht Journal Collective Volume II, First Edition, LSCC, 1985.
- The Gobrecht Journal Collective Volume III, First Edition, LSCC, 1990.
- The Gobrecht Journal Collective Volume IV, First Edition, LSCC, 1996.
- The Gobrecht Journal Collective Volume V, First Edition, LSCC, 2009.
- The Gobrecht Journal individual unbound issues from 1974 to the present.
- National Archives notes researched and complied by Bill Bugert and Randy Wiley.
- Wiley, Randy and Bill Bugert. <u>The Complete Guide To Liberty Seated Half Dollars</u>. Virginia Beach, VA: DLRC Press, 1993.

## **Appendix B: List of Contributors**

- Randy Wiley. This Register would not exist without Randy's assistance. He gracefully shared all his paper files, the coins themselves (I had them for months), information, and years of expertise on the Liberty Seated half dollar series with me. He also allowed me to photograph his collection and ultimately reviewed my final text and provided a wealth of excellent comments.
- Dick Osburn. Dick attended the "Half Dollar Summit" and shared his expertise on the Liberty Seated half dollar series with me. He also allowed me to photograph his collection, especially the die marriages that Randy and I were missing. Dick thoroughly reviewed my pre-publication draft and provide many suggestions and comments.
- John Murison. John attended the "Half Dollar Summit" and shared his expertise on the Liberty Seated half dollar series with me. He also allowed me to photograph his collection, especially the die marriages that Randy and I were missing.
- Scott Mickelson. Scott loaned me some of his very rare 1843 half dollar die marriages for use in this Register. He allowed me to photograph his coins.
- Jim Macor. Jim, LSCC member, graphic artist, and owner of Goldfinch Design designed my cover artwork. He is wonderful to work with and his design is amazing.

# Appendix C: Checklist of Late Date NO Branch Mint Die Marriages

$\sqrt{}$	<u>Date</u>	<u>WB-#</u>	<b>Rarity</b>	<u>Variety</u>
	1839	WB-1	3	No-Drapery
	1839	WB-2	3	No-Drapery
	1839	WB-3	5	No-Drapery
	1839	WB-4	4	No-Drapery
	1839	WB-5	3	With-Drapery
	1839	WB-6	3	With-Drapery
	1839	WB-7	3	With-Drapery
	1840	WB-1	2	Danunghad 40
	1840 1840	WB-1 WB-2		Repunched 40
	1840 1840	WB-2 WB-3	3, 5 3	Triple Dunched ()
	1840	WB-3 WB-4	4	Triple Punched 0
	1840	WB-4 WB-5	3	
	1840	WB-5 WB-6	4	Repunched 8
	1840	WB-0 WB-7	3	Repunched 8
	1840	WB-7 WB-8	4	Repunched 1
	1840	WB-9	3, 6	Obverse Die Crack
	1840	WB-9 WB-10	3, 0	Doubled Date
	1840	WB-10 WB-11	3	Doubled Date
	1040	W D-11	3	
	1841	WB-1	3	Repunched 18
	1841	WB-2	3	1
	1841	WB-3	4	
	1841	WB-4	3	
	1841	WB-5	3	
	1842	WB-1	7	Small Date, Small Letters Reverse
	1842	WB-2	6	Small Date, Repunched 4
	1842	WB-3	6	Small Date, Repunched 4, Doubled Die Reverse
	1842	WB-4	5	Small Date, Doubled Die Reverse
	1842	WB-5	3	Small Date
	1842	WB-6	3	Small Date
	1842	WB-7	2	Small Date, Cud over "TAT"
	1842	WB-8	3	Medium Date
	1842	WB-9	3	Medium Date
	1842	WB-10	3	Medium Date
	1842	WB-11	3	Medium Date, Triple Punched Date
	1842	WB-12	3	Medium Date, Triple Punched Date
	1842	WB-13	3	Medium Repunched Date, 8 in Rock Support
	1842	WB-14	3	Medium Repunched Date, 8 in Rock Support

$\sqrt{}$	<u>Date</u>	<u>WB-#</u>	Rarity	<u>Variety</u>
	1843	WB-1	2	
	1843	WB-2	3	
	1843	WB-3	3	
	1843	WB-4	3	
	1843	WB-5	3, 6	
	1843	WB-6	5	
	1843	WB-7	7?	(Beistle-2D)
	1843	WB-8	6	Tripled 43
	1843	WB-9	4	Tripled 43
	1843	WB-10	3	Tripled 43
	1843	WB-11	3	Tripled 43
	1843	WB-12	3	43 Repunched South
	1843	WB-13	3	•
	1843	WB-14	3	
	1843	WB-15	3	
	1843	WB-16	7?	(Beistle-5J)
	1843	WB-17	3	Repunched Date
	1843	WB-18	3	Repunched Date
	1843	WB-19	3	Repunched 4
	1843	WB-20	6	•
	1843	WB-21	3	Repunched 8
	1843	WB-22	4	-
	1843	WB-23	3	Doubled Die Obverse
	1843	WB-24	6	Doubled Die Obverse
	1843	WB-25	3	Doubled Die Obverse
	1843	WB-26	3	Repunched 4
	1843	WB-27	3	Repunched 4
	1843	WB-28	6	Repunched 4
	1843	WB-29	3	
	1843	WB-30	3	Center Dot
	1843	WB-31	3	Center Dot
	1843	WB-32	3	Center Dot
	1843	WB-33	3	Repunched 4
	1843	WB-34	3	Repunched 4
	1843	WB-35	3	Triple Punched 43
	1843	WB-36	3	Triple Punched 43
	1843	WB-37	3	Repunched 3
	1844	WB-1	4	44 Repunched North, 44 in Dentils
	1844	WB-2	3	44 Repunched North, 44 in Dentils
	1844	WB-3	4	Overlapping 8s in Dentils
	1844	WB-4	3	Overlapping 8s in Dentils
	1844	WB-5	3	Repunched 844
	1844	WB-6	3	Repunched 18
	1844	WB-7	3	Repunched 18
	1844	WB-8	4	Repunched 84
	1844	WB-9	3	Repunched 844

$\sqrt{}$	<b>Date</b>	<u>WB-#</u>	<b>Rarity</b>	<u>Variety</u>
	1844	WB-10	3	Repunched 844
	1844	WB-11	5	Dramatically Repunched 844
	1844	WB-12	3	, 1
	1844	WB-13	3	
	1844	WB-14	3	Repunched 44
	1844	WB-15	3	•
	1845	WB-1	3	Repunched 84
	1845	WB-2	3	
	1845	WB-3	3	
	1845	WB-4	4	
	1845	WB-5	3	
	1845	WB-6	6	
	1846	WB-1	3	Medium Date
	1846	WB-2	3	Medium Date
	1846	WB-3	4	Medium Date, Repunched 4
	1846	WB-4	3	Medium Date, Errant 6, So-called 1846/5
	1846	WB-5	3	Medium Date, Errant 6, So-called 1846/5
	1846	WB-6	4	Medium Date, Errant 6, So-called 1846/5
	1846	WB-7	3	Medium Date, 6/Horizontal 6
	1846	WB-8	3	Medium Date
	1846	WB-9	3	Medium Date
	1846	WB-10	3	Medium Date, Doubled Die Obverse
	1846	WB-11	3	Large Date, Tripled 1 & 4
	1846	WB-12	3	Large Date
	1846	WB-13	3	Large Date, Spiked 4
	1846	WB-14	3	Large Date, Spiked 4, Crumbling Reverse Die
	1846	WB-15	3	Large Date
	1846	WB-16	3	Large Date
	1846	WB-17	3	Large Date
	1847	WB-1	3	
	1847	WB-2	3	7 Repunched North
	1847	WB-3		, 10pm, 10m
	1847	WB-4	3 3	
	1847	WB-5	3	
	1847	WB-6	3	Repunched 47
	1847	WB-7	3	repaired ()
	1847	WB-8	4	
	1847	WB-9	5	1847 Repunched over 1846
	1847	WB-10	5	LDS 1847 over 1846, 2 <sup>nd</sup> Reverse
	1847	WB-11	3	1011 0101 1010, <u></u>
	1847	WB-12	4	
	1847	WB-13	4	
_	1017	,, 10	•	

$\sqrt{}$	<u>Date</u>	<u>WB-#</u>	Rarity	<u>Variety</u>
	1848	WB-1	3	
	1848	WB-2	3	
	1848	WB-3	3	
	1848	WB-4	3	Repunched 4, So-called 1848/7
	1848	WB-5	4	
	1848	WB-6	3	Repunched 4, So-called 1848/7
	1848	WB-7	3	Repunched 18, Doubled Die Reverse
	1848	WB-8	3	
	1848	WB-9	4	Crumbling Die – V1
	1848	WB-10	5	
	1848	WB-11	4	
	1848	WB-12	6	Repunched 184
	1848	WB-13	4	
	1848	WB-14	4	a 5
	1848	WB-15	3	Crumbling Die – V2
	1848	WB-16	5	Crumbling Die – V2
	1848	WB-17	3	
	1849	WB-1	4	
	1849	WB-2	3	Repunched 9
	1849	WB-3	3	Repunched 9
	1849	WB-4	4	-
	1849	WB-5	3	
	1849	WB-6	5	Dramatically Doubled Date
	1849	WB-7	4	
	1849	WB-8	4	
	1849	WB-9	3	Doubled Date
	1849	WB-10	3	Errant 8 from Dentil
	1849	WB-11	3	Repunched 1
	1849	WB-12	3	
	1849	WB-13	4	Repunched 184
	1849	WB-14	3	
	1849	WB-15	4	
	1850	WB-1	4	Repunched 0
	1850	WB-2	3	Repunched 0
	1850	WB-3	3	
	1850	WB-4	3	
	1851	WB-1	4	Repunched 2 <sup>nd</sup> 1
	1851	WB-2	4	Repunched 2 <sup>nd</sup> 1
	1851	WB-3	4	Repunched 2 <sup>nd</sup> 1
	1851	WB-4	4	Repunched 18
	1851	WB-5	4	Repunched 18
	1851	WB-6	4	
	1851	WB-7	5	
	1851	WB-8	6	Errant 8 in Dentils

	<b>Date</b>	<u>WB-#</u>	<u>Rarity</u>	<u>Variety</u>
	1852	WB-1	4	
	1852	WB-2	4	
П	1852	WB-3	4	